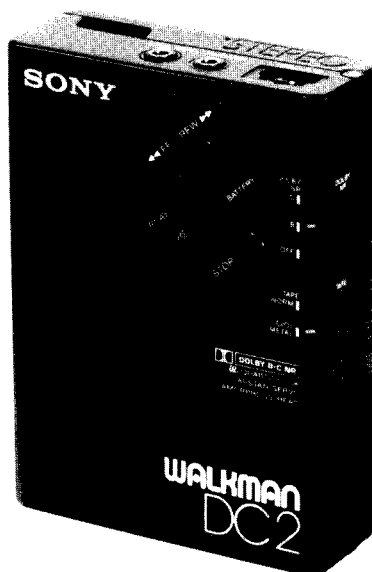


WM-DC2

SERVICE MANUAL

Refer to MDR-40L Service Manual issued previously for information of headphones supplied with this set.



*US Model
Canadian Model
AEP Model
UK Model
E Model*

'Dolby' and the double-D symbol are the trade marks of Dolby Laboratories Licensing Corporation. Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.

SPECIFICATIONS

Power Requirements: 3 V dc, two batteries size AA (IEC designation R6)
DC IN 3 V jack accepts;
• battery case (optional) EBP-500 for use on two batteries size D (IEC designation R20)
• ac power adaptor (optional): Refer to the following chart to choose the correct adaptor

Model	AC power line voltage	Optional ac power adaptor
US, Canada	120 V ac, 60 Hz	AC-39 available in the US and Canada
AEP	220 V ac, 50 Hz	AC-37 available in European countries
UK	240 V ac, 50 Hz	AC-37 available in United Kingdom
E	120 V ac (110, 220 or 240 V ac, adjustable by Sony personnel), 50/60 Hz 110, 120, 220 or 240 V ac adjustable, 50/60 Hz	AC-38 available in Japan AC-38 available in other countries

Tape Transport Mechanism Type

MF-WMDC2-24

• 12 V car battery: Sony DCC-127A* car battery cord
*For connection with the DCC-127A, the optional PC-200 dc plug adaptor is required.

Dimensions: 79 (w) x 109 (h) x 29 (d) mm
3 1/8 (w) x 4 3/8 (h) x 1 3/16 (d) inches
not including projecting parts

Weight: 305 g, 0.67 lb, including batteries

Recording System: 4-track, 2-channel stereo

Wow and Flutter: 0.07% WRMS (NAB)
±0.13% (DIN)

Tape Speed Deviation: ±0.5%

Frequency Response: 40 – 15,000 Hz ± 3 dB
(DOLBY NR OFF)

— Continued on page 2 —



STEREO CASSETTE-CORDER
SONY®



WM-DC2

Signal-to-noise Ratio
(NAB, at peak level):

Dolby NR switch	OFF	B-TYPE ON	C-TYPE ON
Cassette			
TYPE IV (Sony METALLIC)	58 dB	65 dB	71 dB
TYPE III (Sony UCX)	58 dB	65 dB	71 dB
TYPE I (Sony BHF)	54 dB	61 dB	67 dB

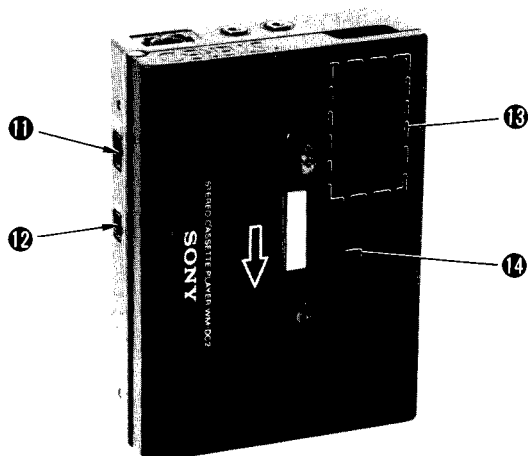
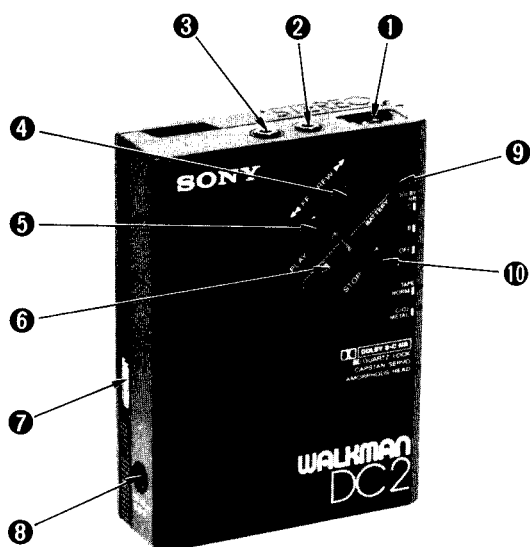
Outputs: LINE OUT (stereo minijack) ... 1
output level 0.25 V (less than 4.7 k Ω)
Headphones (stereo minijack) ... 2
load impedance 8 — 300 ohms

Power Output: Headphones
20 mW + 20 mW (at 10% harmonic distortion)
load impedance 32 ohms

Battery Life: Approx. 3.5 hours with supplied Sony SUM-3
(Continuous playback hours) (NS) New Super batteries
Approx. 7 hours with Eveready No. E91
alkaline batteries

FEATURES

- DD (Disc Drive) system and quartz lock capstan servo system that has superior anti-rolling effect and low wow and flutter have been employed.
- C-type Dolby NR (noise reduction) system
In addition to conventional B-type Dolby NR system, this cassette deck employs newly-developed C-type Dolby NR system which reduces tape noise twice as effectively as B-type System.
- Laser Amorphous head provides a wider dynamic range and a more extended frequency response, especially in high frequency range.
- LINE OUT jack
- Capable of selecting NORM or METAL CrO₂ position by type of tape in use.
- Auto shut-off mechanism in FWD mode and auto off mechanism in FF, REW modes.



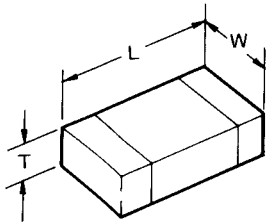
PARTS IDENTIFICATION

- 1 VOLUME control
- 2 PHONES (headphones) jack (stereo minijack)
- 3 LINE OUT jack (stereo minijack)
- 4 REW (rewind) button
- 5 FF (fast forward) button
- 6 PLAY (playback) button
- 7 OPEN button
- 8 DC IN 3V (external power input) jack
- 9 BATTERY indicator
- 10 STOP button
- 11 DOLBY NR selector and indicators
- 12 TAPE selector and indicators
- 13 Battery compartment (inside)
- 14 Cassette holder

SERVICING NOTES

Chip components

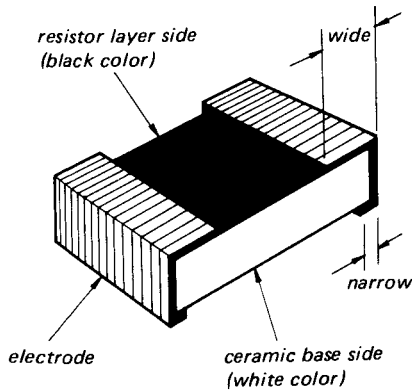
Chip components include resistors, capacitors, transistors, diodes, coil and adjustable resistors.
 In this section, the types of resistors, ceramic capacitors, transistors and diodes which are used most frequently will be described.
 Dimension of transistors and capacitors



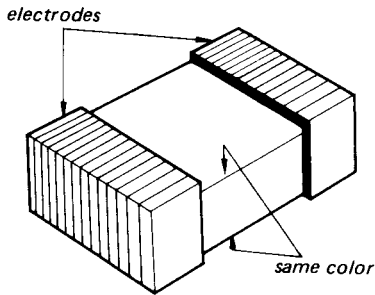
(Unit: mm)

Type	L	W	T
3216	3.2	1.6	0.45 ~ 0.6
2125	2.0	1.25	0.35 ~ 0.5

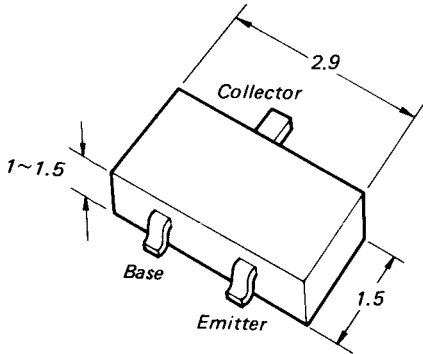
Identification



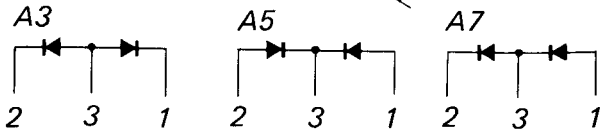
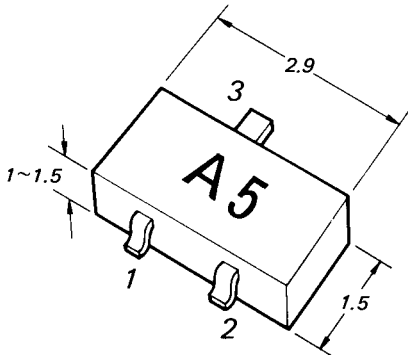
Resistor



Laminated Ceramic Capacitor



Transistor



Diode

Replacing chip components

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

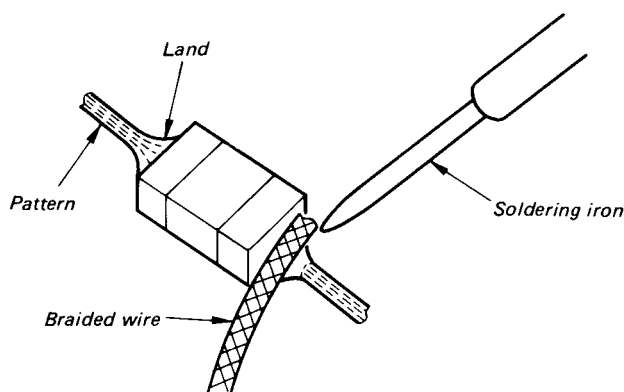
Precautions for replacement

1. Do not disconnect the chip component forcefully. Otherwise, the pattern may peel off.
2. Never re-use a disconnected chip component. Dispose of all old chip components.
3. To protect the chip component, heating time for attaching the component should be within 3 seconds.

○ Removing chip components

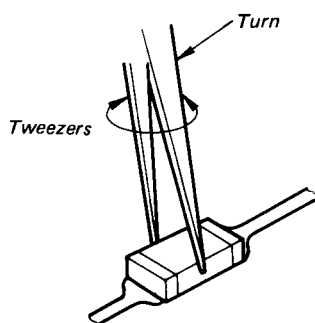
(1) Removing solder at electrode

Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.



(2) Disconnecting chip components

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off. Never re-use a disconnected chip component.



(3) Smoothing the soldered surface

After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

○ Connecting chip components

The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

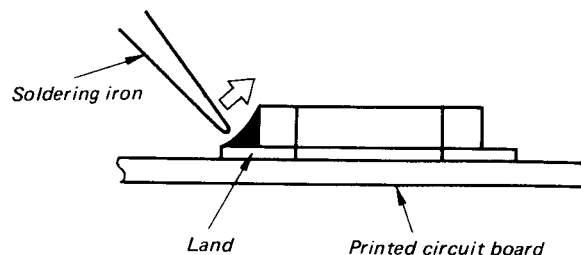
(1) Applying solder to land on one side

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.



(2) Speedy soldering

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.

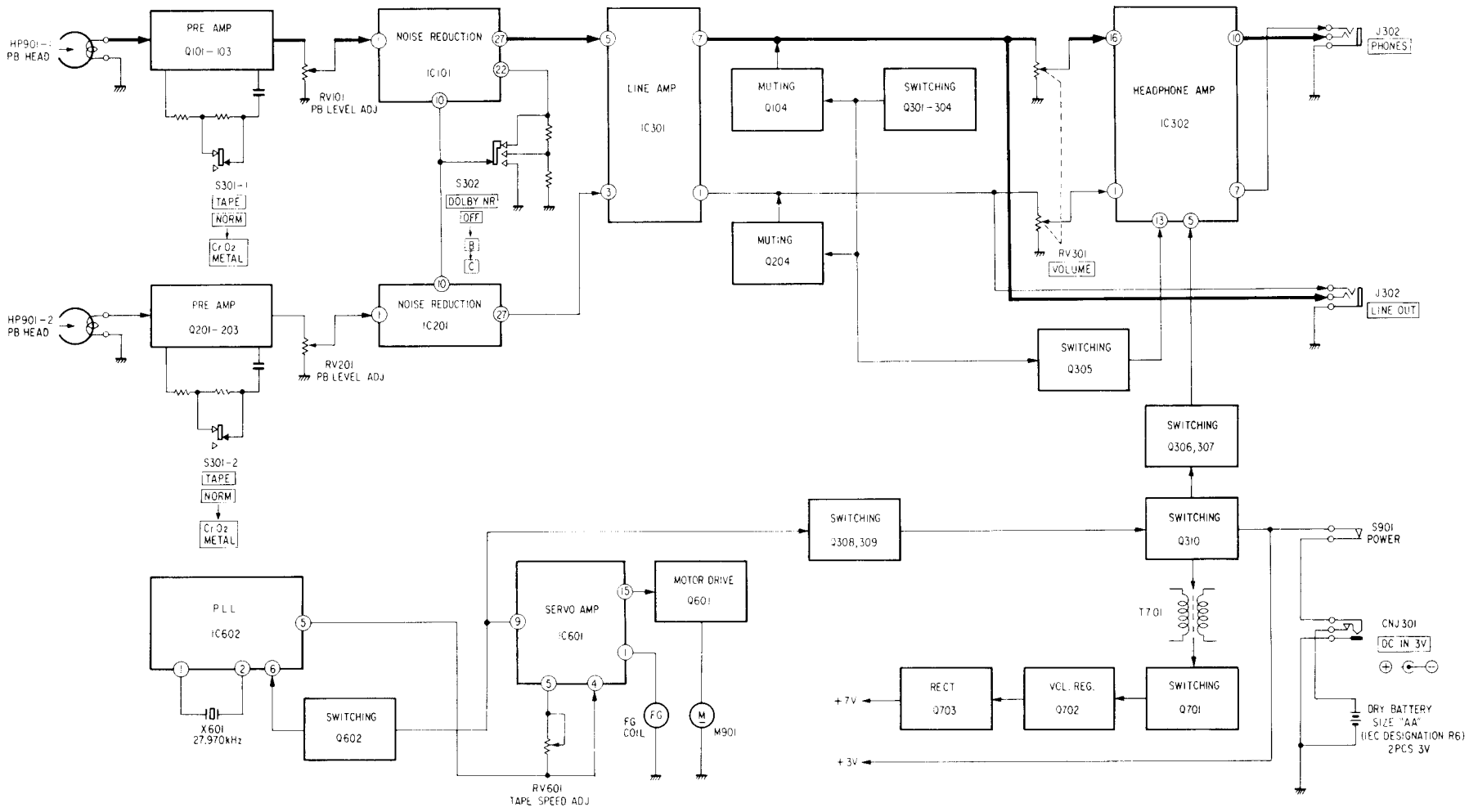


(3) Speedy soldering of electrode on the other side

Solder the electrode on the other side in the same way as in (2) above.

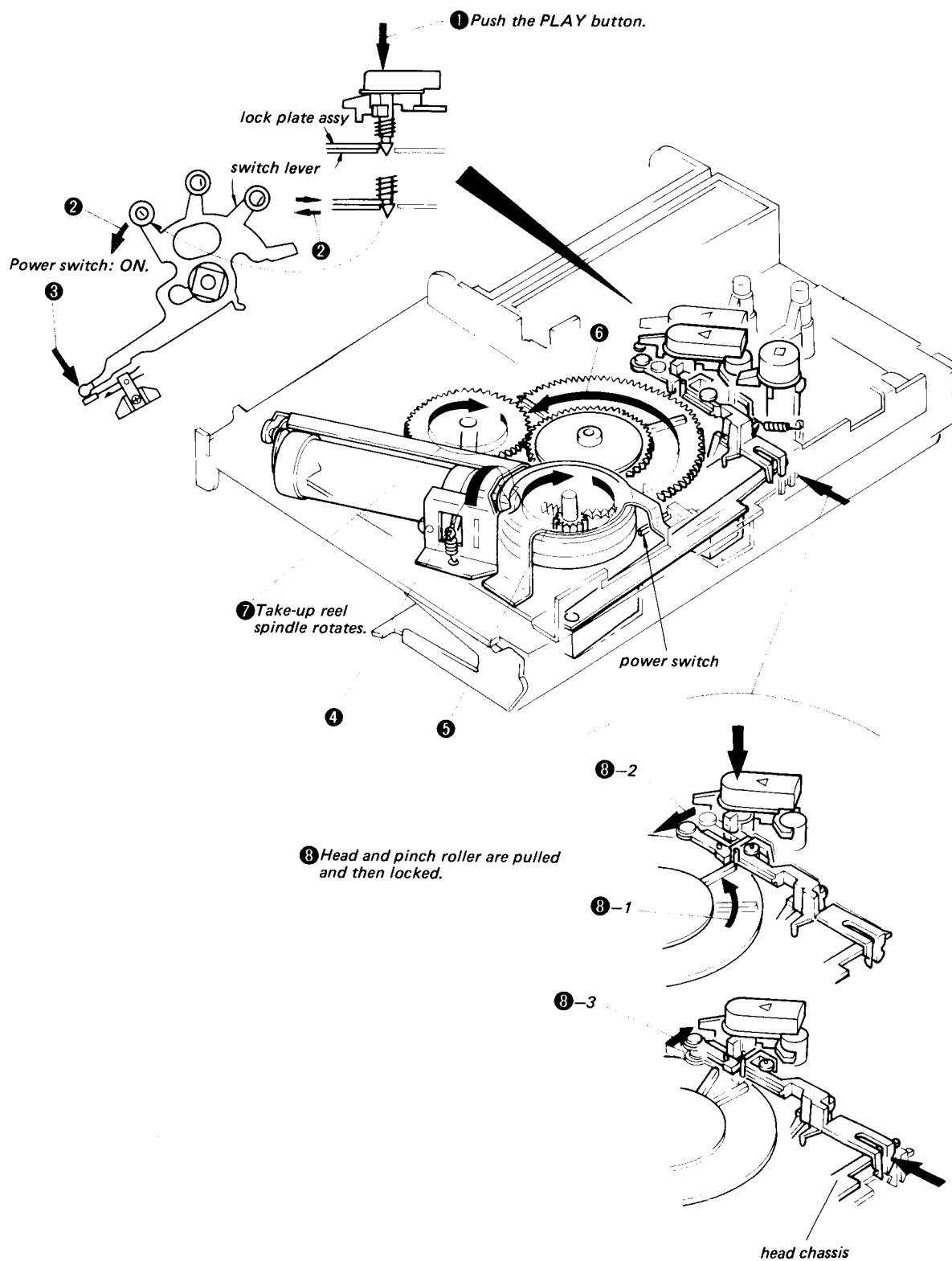
SECTION 1

BLOCK DIAGRAM

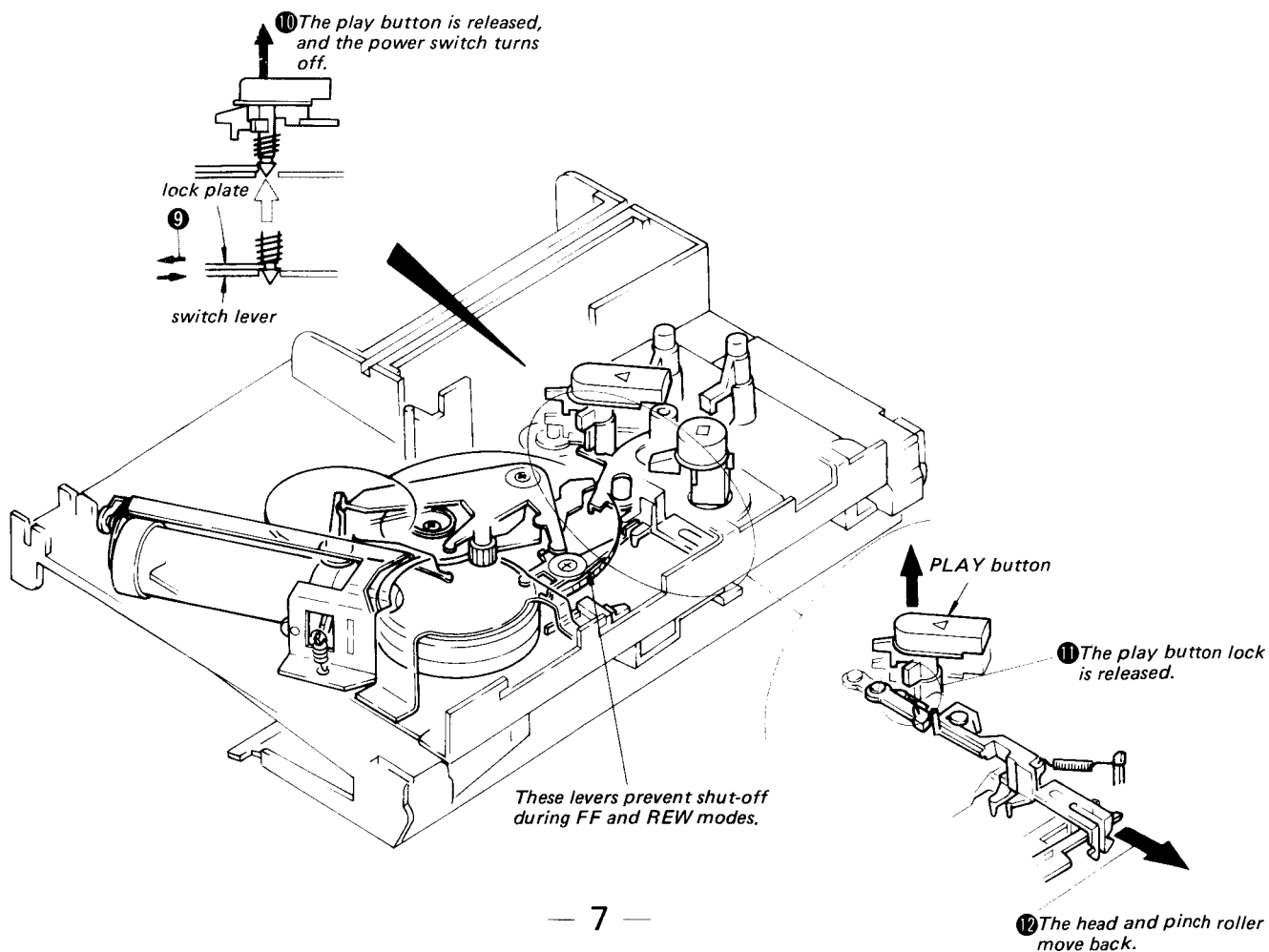
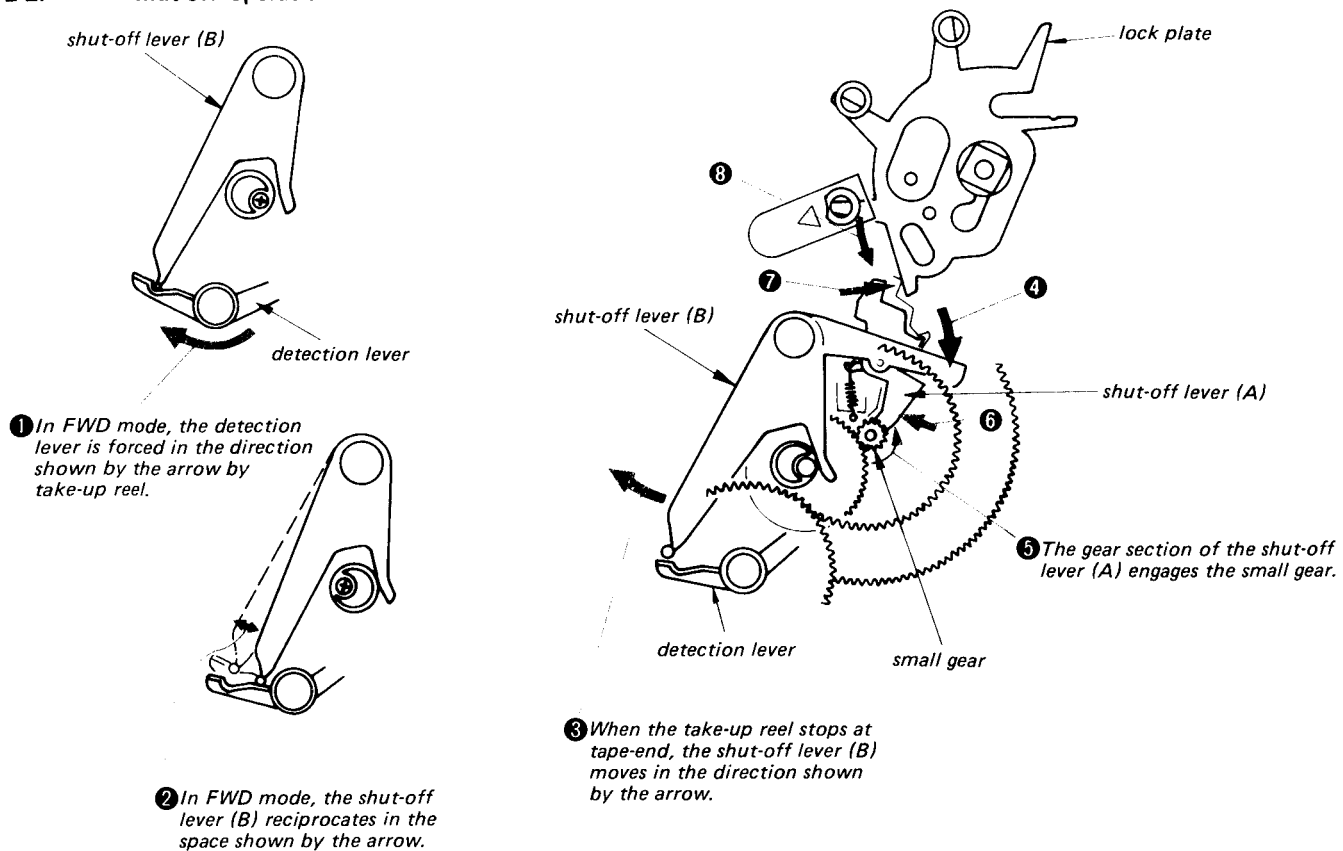


SECTION 2 MECHANICAL OPERATION

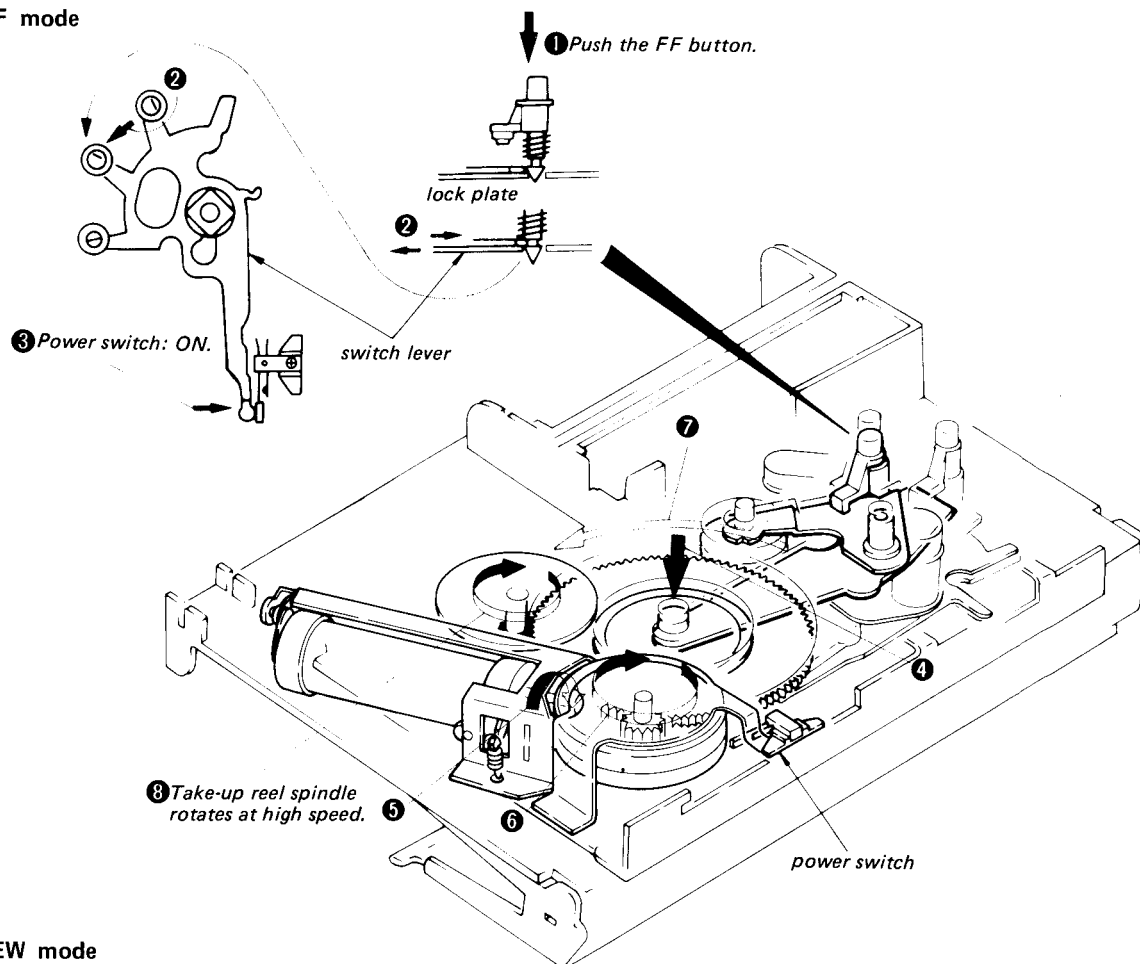
2-1. FWD mode



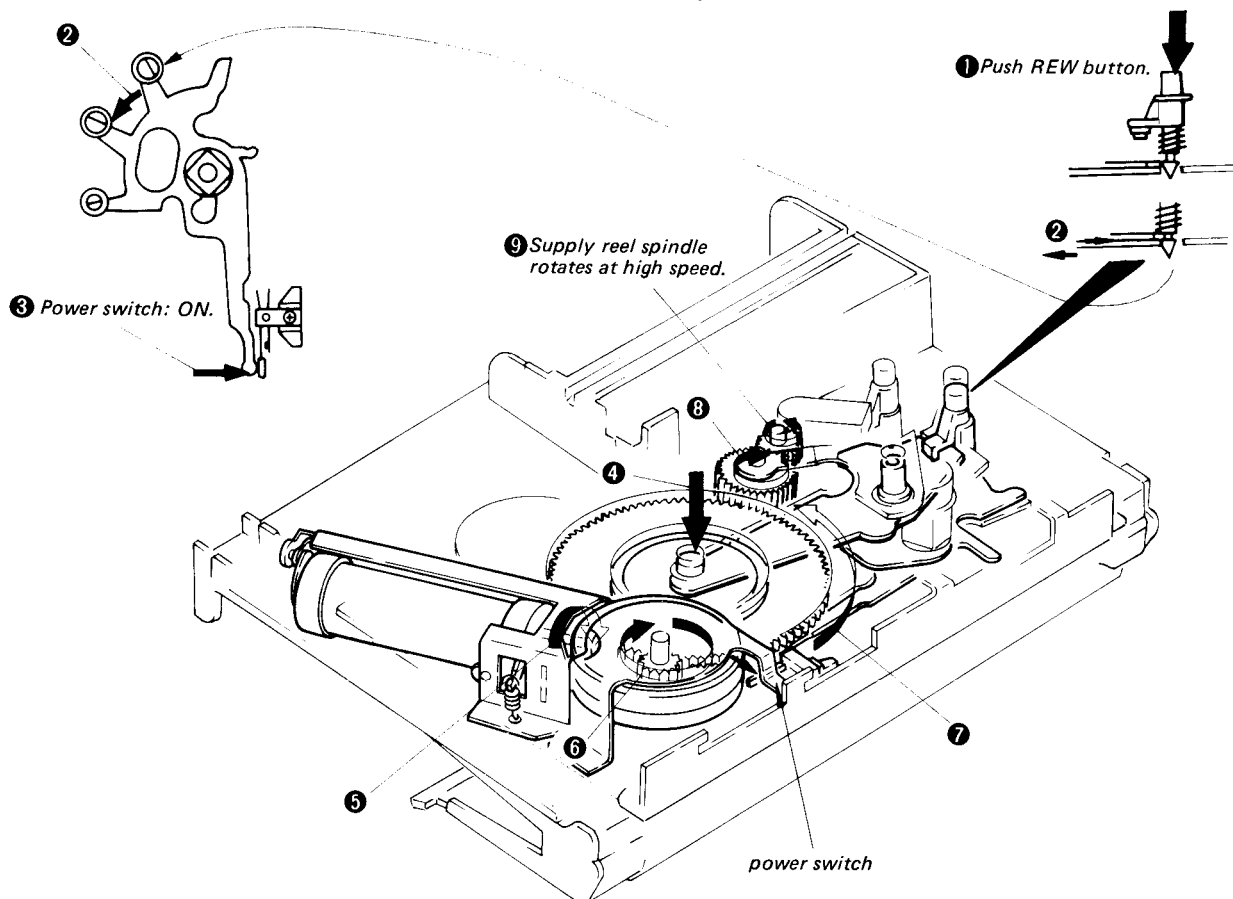
2-2. Auto shut-off operation at FWD mode



2-3. FF mode



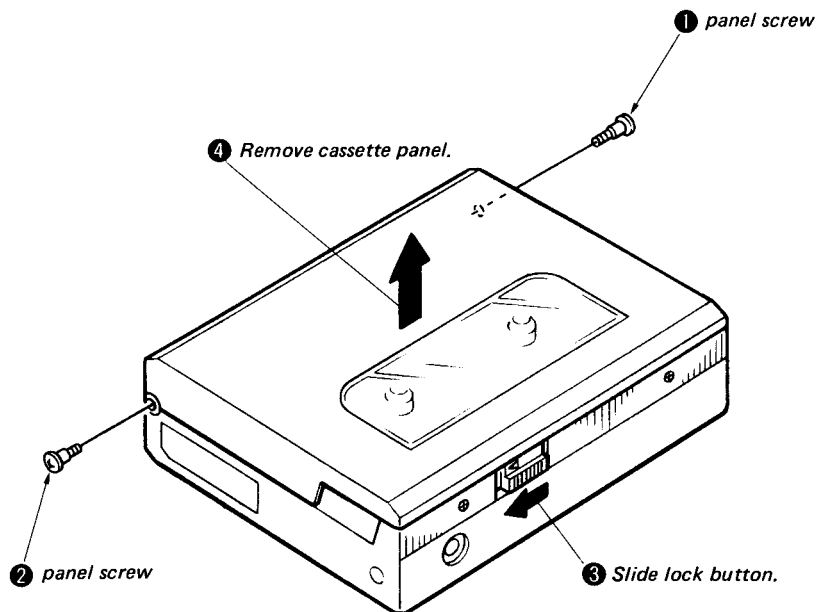
2-4. REW mode



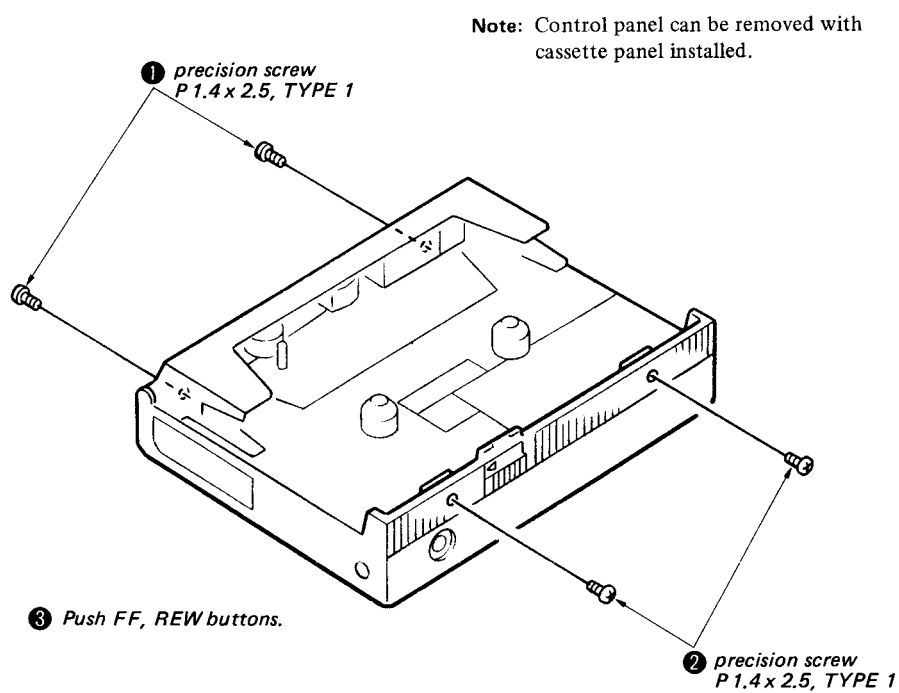
SECTION 3 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

Cassette Panel

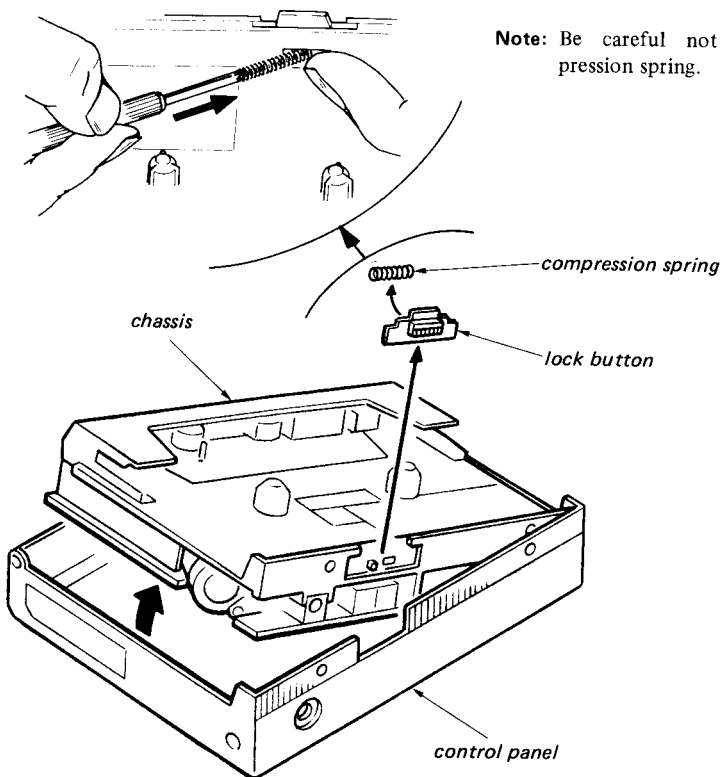


Control Panel



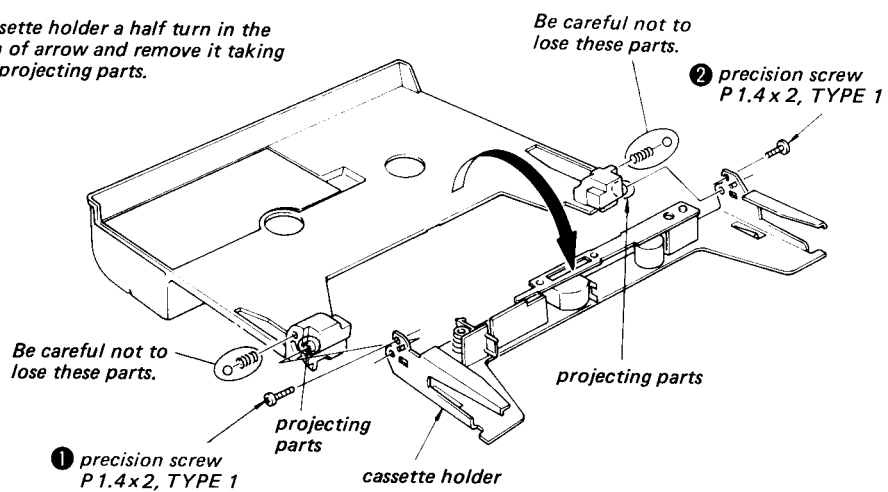
Chassis

(Installing compression spring)



Cassette holder

Turn cassette holder a half turn in the direction of arrow and remove it taking care the projecting parts.



Pinch roller and head can be replaced.

SECTION 4 ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENTS

Torque Measurement

Perform with 2.5 V DC power.

	Torque meter	Meter reading
FWD	CQ-102C	22 – 46 g•cm (0.3 – 0.63 oz•inch)
FF, REW	CQ-201B	More than 65 g•cm (More than 9.04 oz•inch)
Back Tension	CQ-102C	1 – 3.5 g•cm (0.01 – 0.05 oz•inch)
Tape Pulling Force	CQ-403	More than 80 g•cm (More than 11.12 oz•inch)



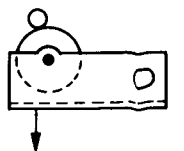
Pinch Roller Pressure Adjustment

— Playback Mode —

1. Pull the spring scale in the direction shown by the arrow.
2. Slowly return the pinch roller and read the spring scale just when the pinch roller starts rotating.

Specification:

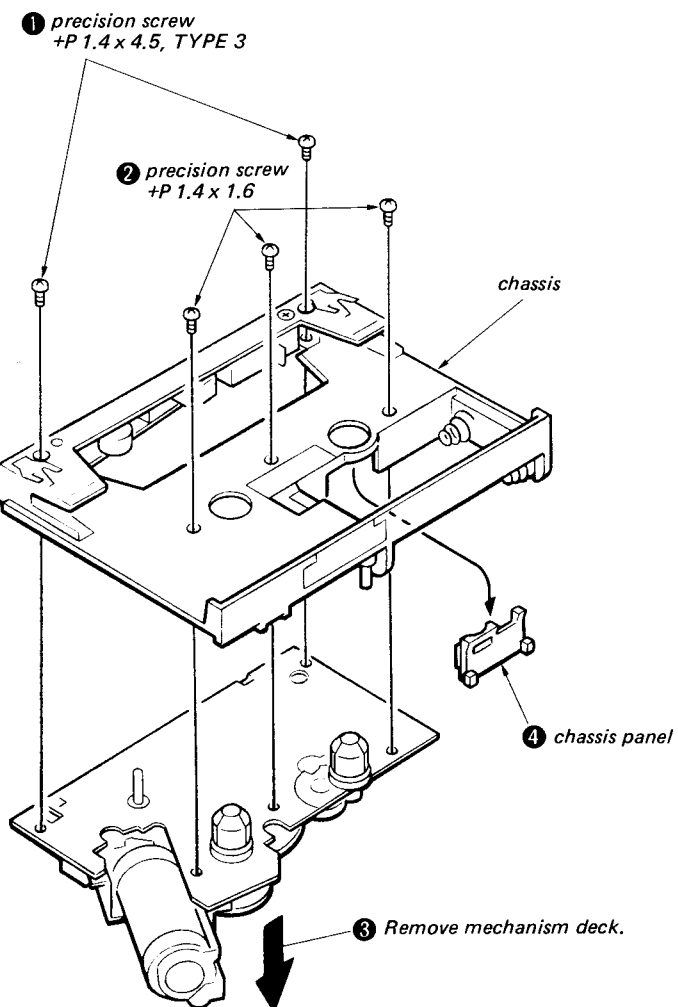
170 ± 20 g (5.3 ~ 6.7 oz)



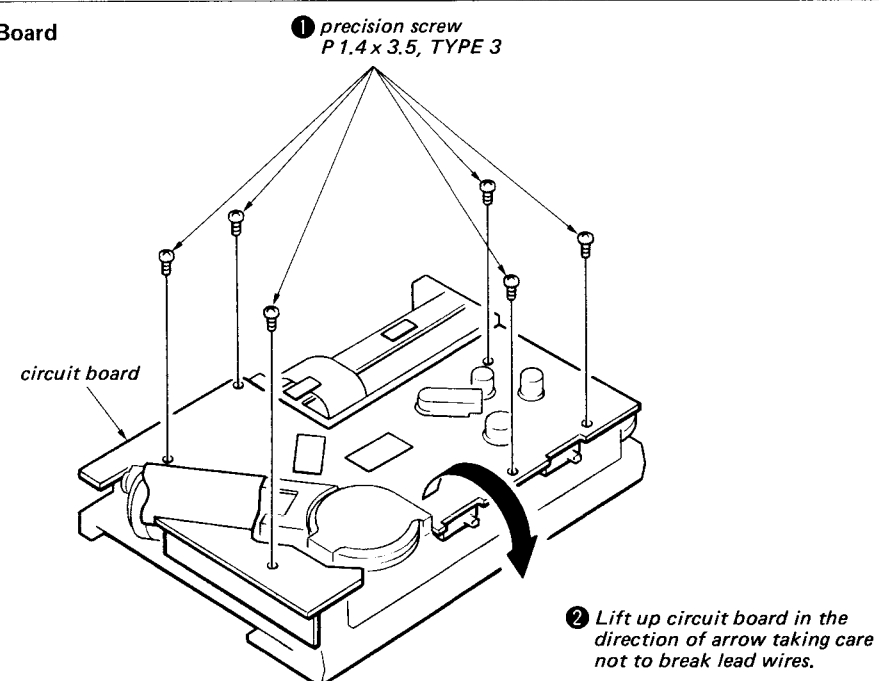
PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
 playback head pinch roller
 capstan rubber belts
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

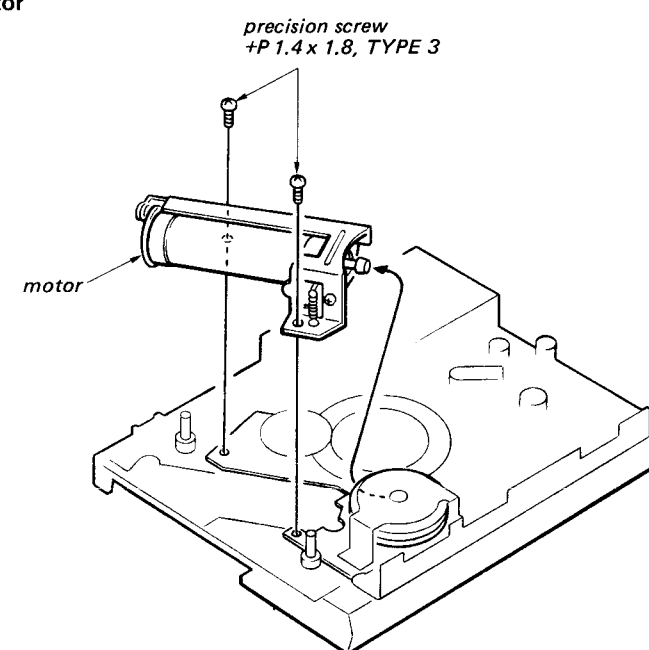
Chassis



Circuit Board



Motor



Tape Path Adjustment

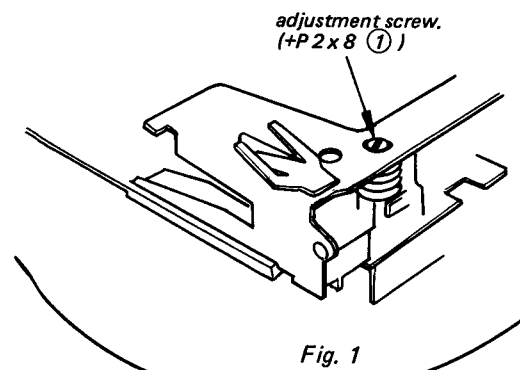
Settings:

Power voltage: 2.5 V dc
Unit setting: horizontal

Procedures:

- At Supply Side Tape Guide (Fig. 1)
 - Play test tape (CQ-009C or CQ-012).
 - Adjust screw (+P 2 x 8) to obtain no tape curl at tape guide.
- At PB Head (Figs. 2, 3)
 - Play test tape (CQ-009C or CQ-012).
 - Adjust head height adjustment screw to obtain no tape curl at tape guide of PB head.

Note: Adjustment Shim; 0.1 mm thick (Part No. 3-578-138-01).



tape curl 0.2 mm or less
(at upper tape guide)

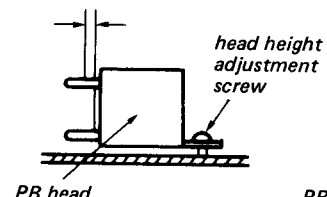


Fig. 2

no tape curl
(at lower tape guide)

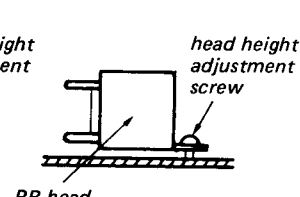


Fig. 3



Gear Position Adjustment

• In play mode

Make sure that each gear is positioned as illustrated in Fig. 1.

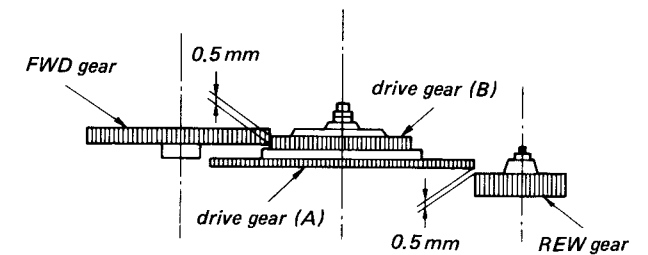


Fig. 1 In play mode

• In FF mode

- When contact portion between FF gear and drive gear (A) is less than 0.5 mm, adjust contact portion by prying out drive lever (A) with a screwdriver as illustrated in Fig. 4.
- When clearance between REW gear and drive gear (A) is less than 0.2 mm, adjust by bending drive lever (A) with a screwdriver as illustrated in Fig. 4.

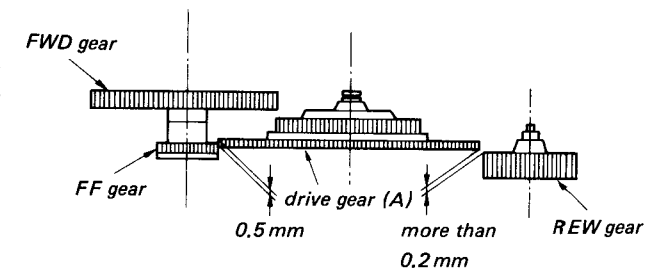


Fig. 2 In FF mode

• In REW mode

- When clearance between FWD gear and drive gear (B) is less than 0.2 mm, adjust clearance by prying out drive lever (A) with a screwdriver as illustrated in Fig. 4.
- When clearance between drive gear (A) and FF gear is less than 0.2 mm, adjust by bending drive lever (A) with FF button pushed.

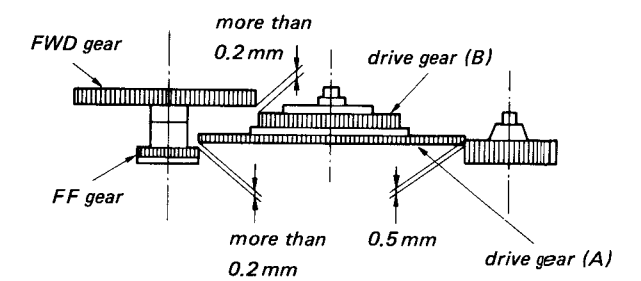


Fig. 3 In REW mode

Note: Adjustment should be made with power turned on and tape cassette inserted.

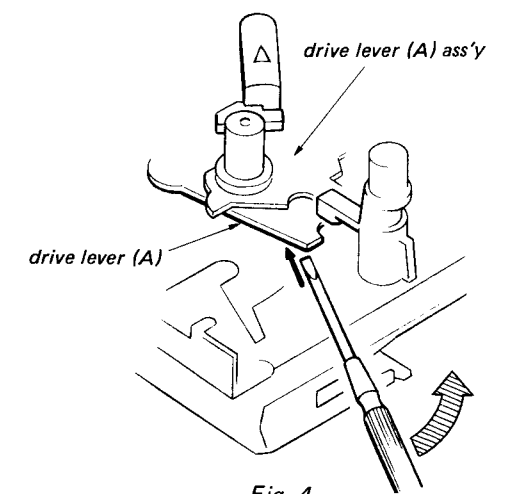
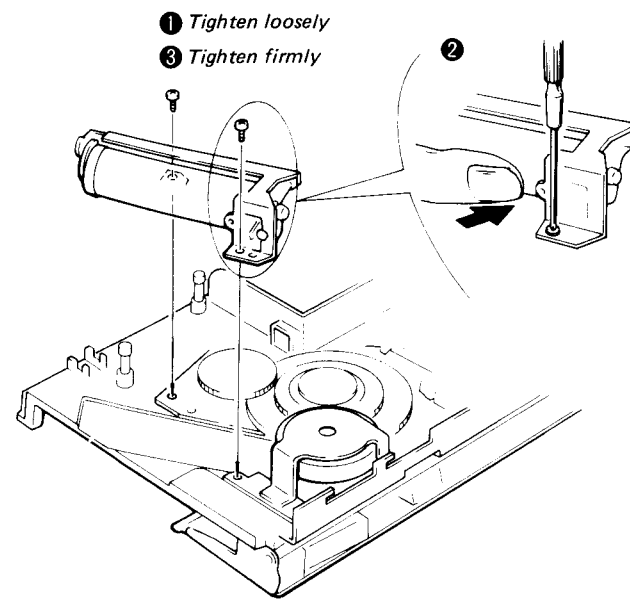


Fig. 4

1. Motor Section Installation



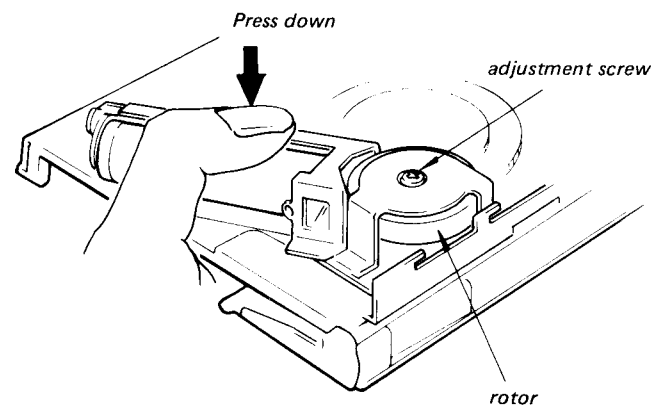
2. Wow & flutter and Motor Position

- Adjust with the thrust screw so that rotor thrust play is within 0.1 mm. (When confirming play, press motor down so that the motor pulley and rotor rubber section do not touch.)
- Adjust with the adjustment screw so that current drain satisfies the value below in FWD mode.

Current drain:

Approx. 5 mA higher current than minimum point, in tightening direction.

Note: If the adjustment screw is loosened too much, adjustment will be impossible. Perform adjustment within 5 turns from the tightened state.



- Confirm that the wow meter value is less than 0.08% W•RMS.

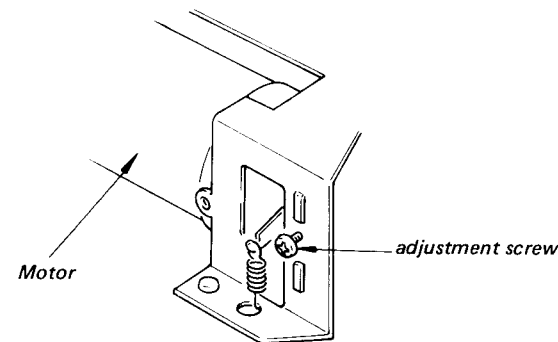
Conditions: — FWD mode

— power supply voltage: 2.5 V

— tape: WS-48 (3 kHz, 0 dB)

Use portion near the end.

- At 2 V power supply voltage, confirm normal FWD operation.
- When 3 and 4 are not satisfied, repeat adjustment again starting with "Motor Section Installation".



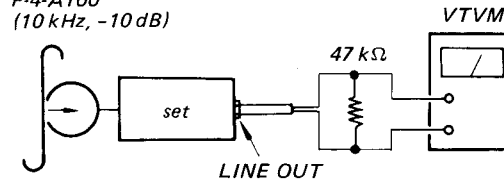
4-2. ELECTRICAL ADJUSTMENTS

Playback Head Azimuth Adjustment

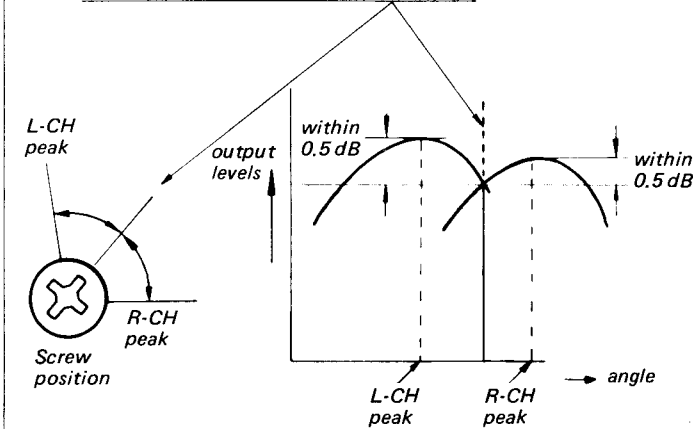
Procedure:

- Mode: playback

test tape
P-4-A100
(10 kHz, -10 dB)

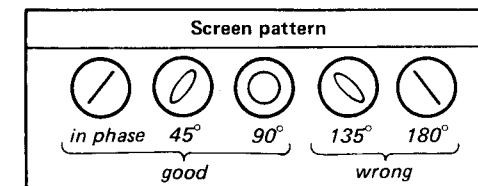
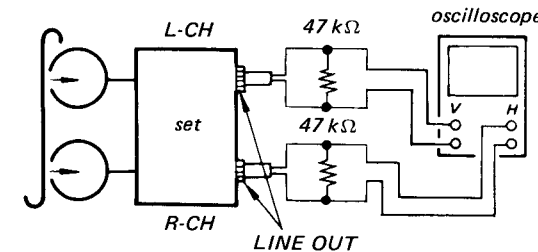


- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0.5 dB.

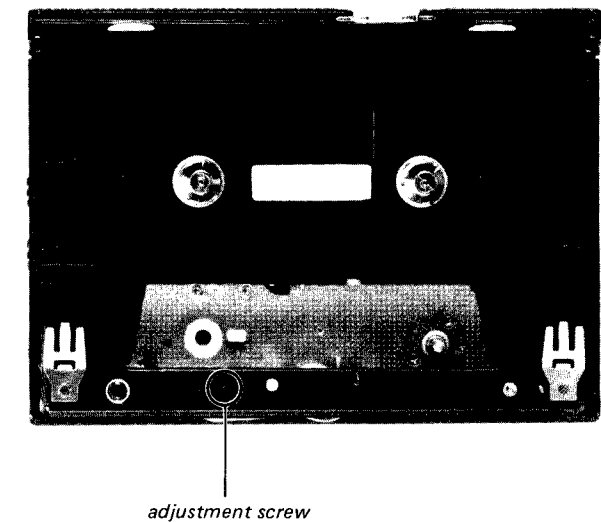


- Phase Check
Mode: playback

test tape
P-4-A063
(6.3 kHz, -10 dB)



Adjustment Location:



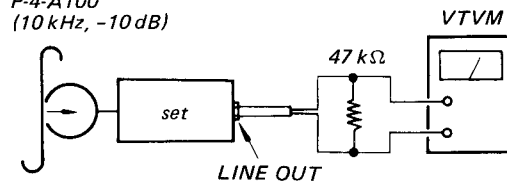
4-2. ELECTRICAL ADJUSTMENTS

Playback Head Azimuth Adjustment

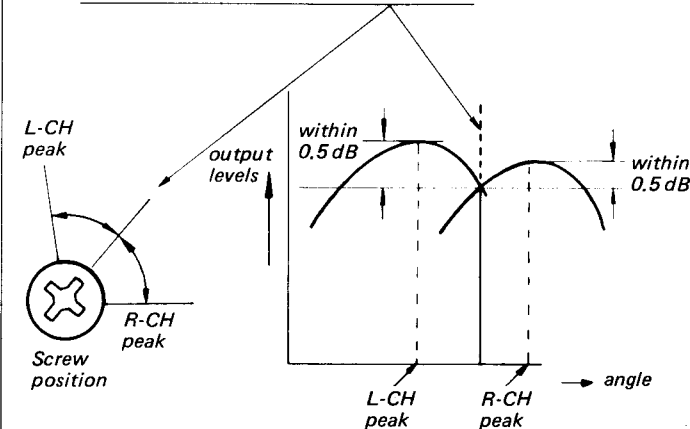
Procedure:

1. Mode: playback

test tape
P-4-A100
(10 kHz, -10 dB)

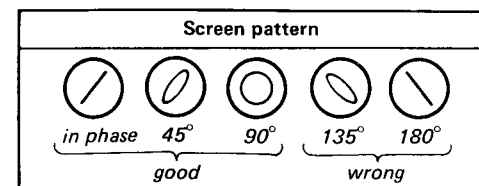
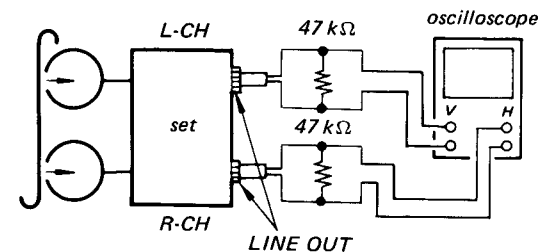


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0.5 dB.

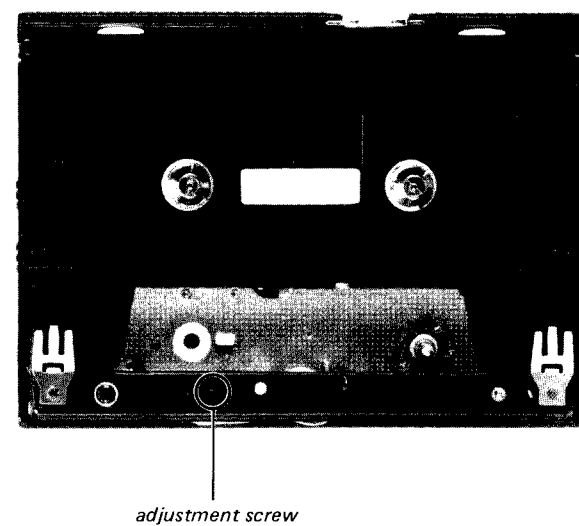


3. Phase Check
Mode: playback

test tape
P-4-A063
(6.3 kHz, -10 dB)



Adjustment Location:



Tape Speed Adjustment

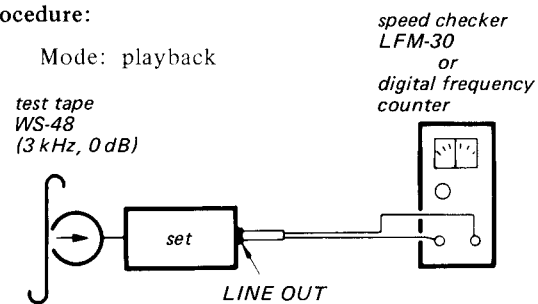
Setting:

VOLUME control: mechanical mid

Procedure:

Mode: playback

test tape
WS-48
(3 kHz, 0 dB)



Specification:

Speed checker	Digital frequency counter
±0.3%	3,080 – 3,100 Hz

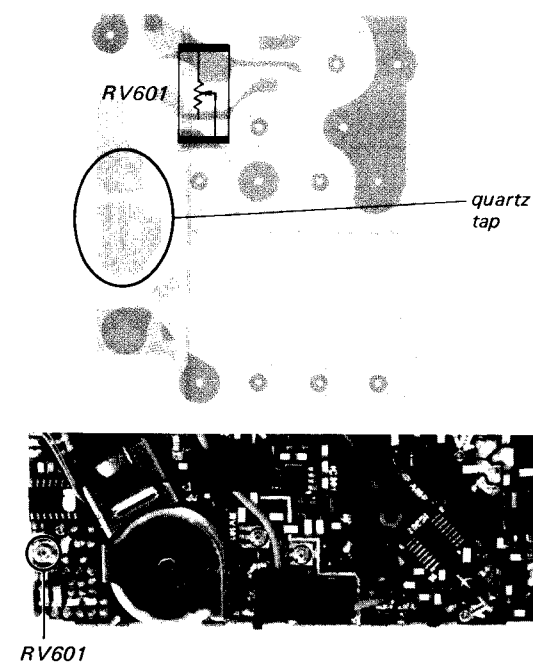
(at tape end, quartz tap OFF)

After completing to make the adjustment, confirm that the following specification is met.

Speed checker	Digital frequency counter
±0.3%	2,991 – 3,009 Hz

(at tape beginning, quartz tap ON)

Adjustment Location:



After completing to make the adjustment, be sure to connect the quartz tap pattern with soldering.

Playback Level Adjustment

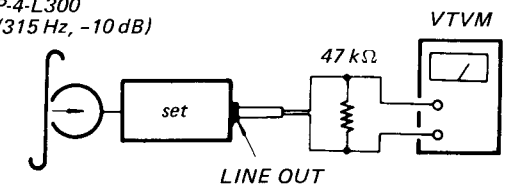
Setting:

VOLUME control: mechanical mid

Procedure:

Mode: playback

test tape
P-4-L300
(315 Hz, -10 dB)



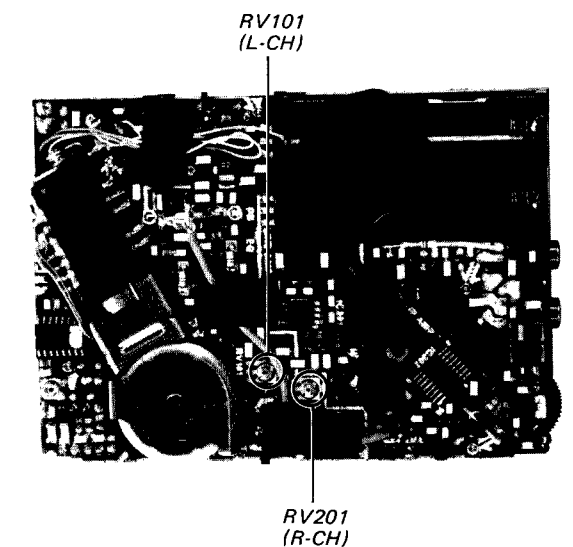
Specification:

LINE OUT level:
0.25 V (-9.8 ±0.2 dB)

- 1) If necessary, adjust RV101 (L-CH) and RV201 (R-CH) for the specification.
- 2) Confirm that the output level of HEAD-PHONES is not changed when repeating playback and stop.

Adjustment Location:

— audio board —



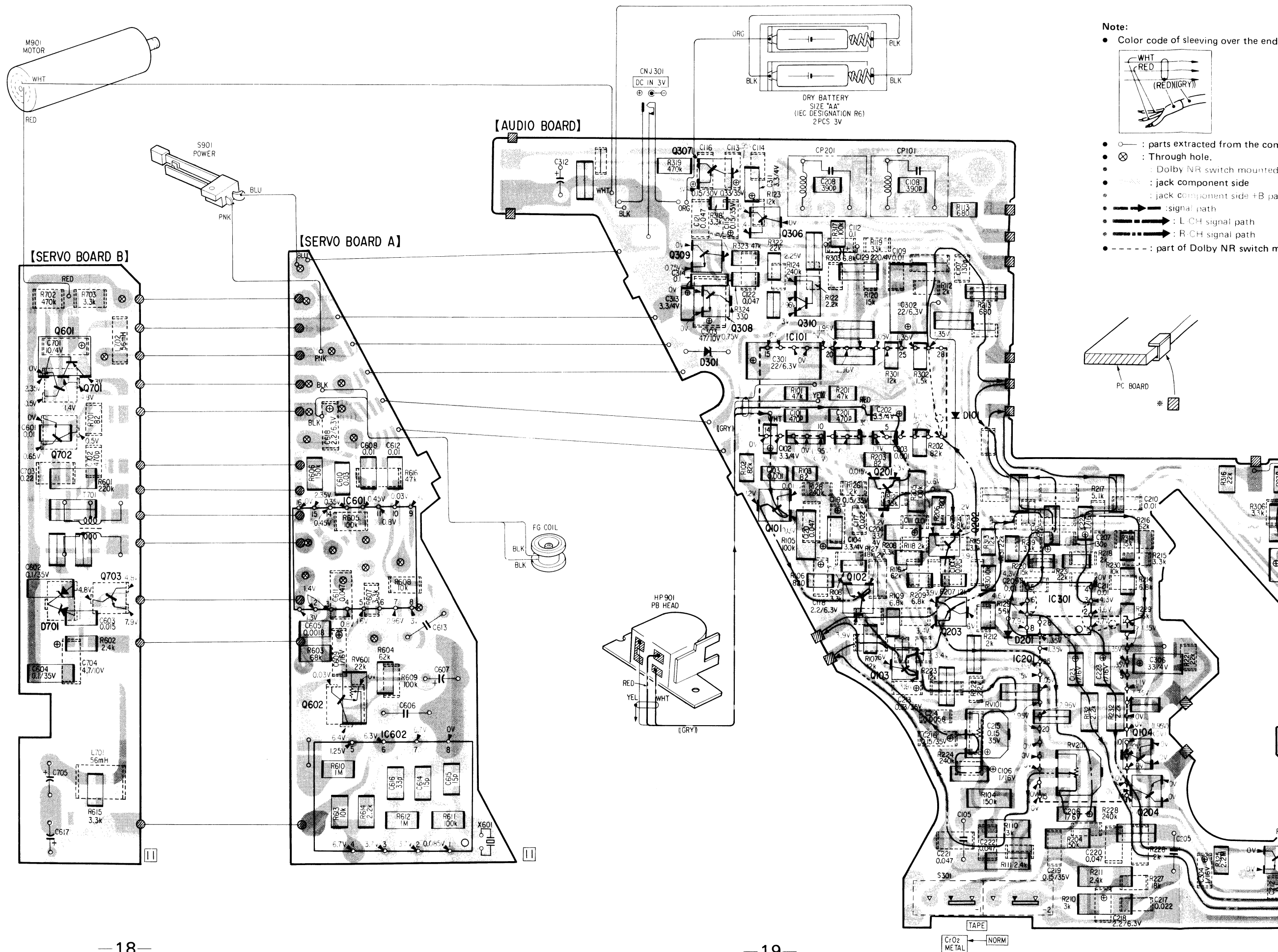
SECTION 5

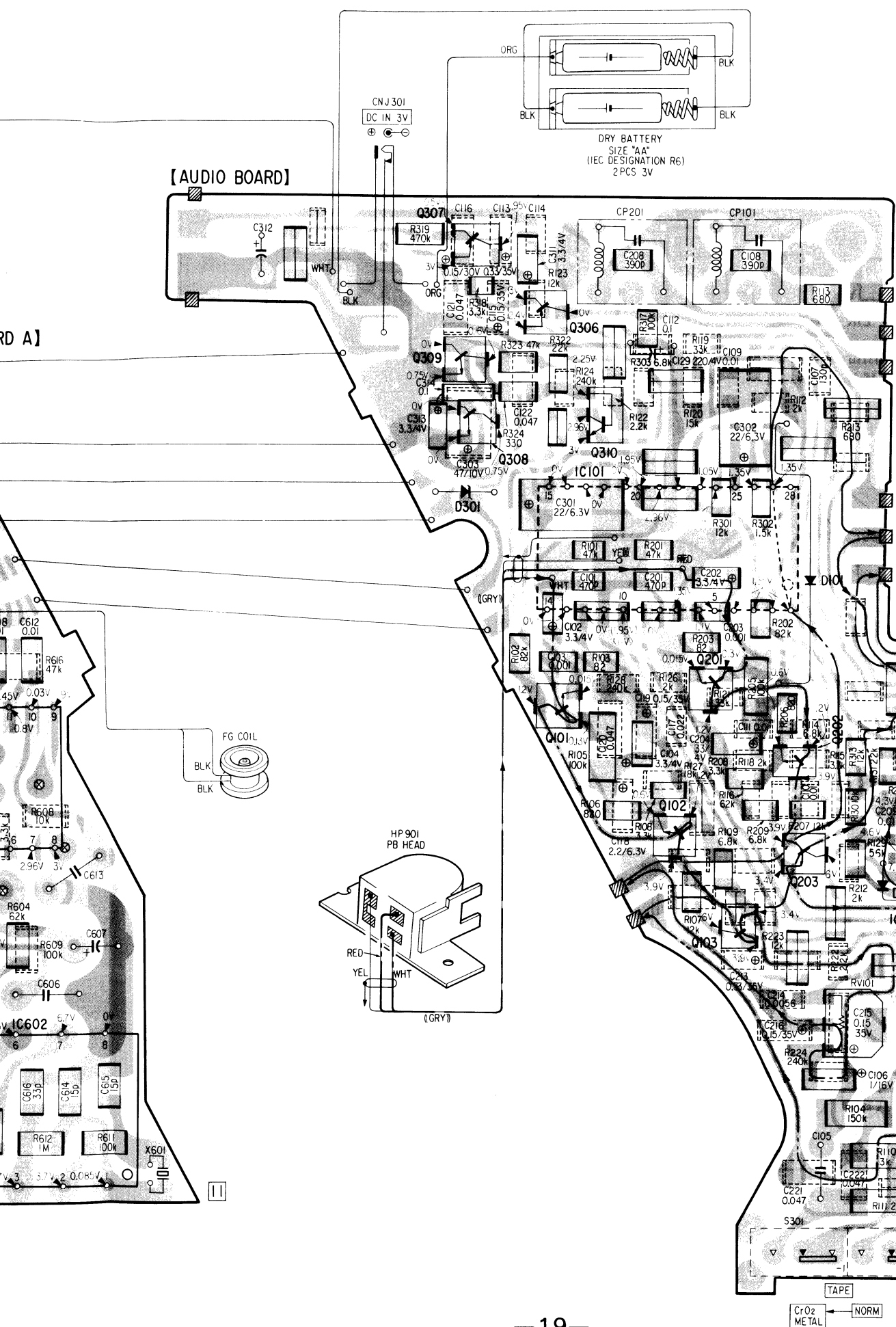
DIAGRAMS

5-1. MOUNTING DIAGRAM

A
B
C
D
E
F
G
H
I
J

Q · IC	D
601	
701	
702	
IC601	
703	701
602	
IC602	





Note:

- Color code of sleeving over the end of the jacket.

- ○ : parts extracted from the component side.
- ⊗ : Through hole.
- ⊕ : Dolby NR switch mounted side
- ⊖ : jack component side
- ⊙ : jack component side (B pattern)
- ——— : signal path
- ——— : L-CH signal path
- ——— : R-CH signal path
- - - - - : part of Dolby NR switch mounted side.

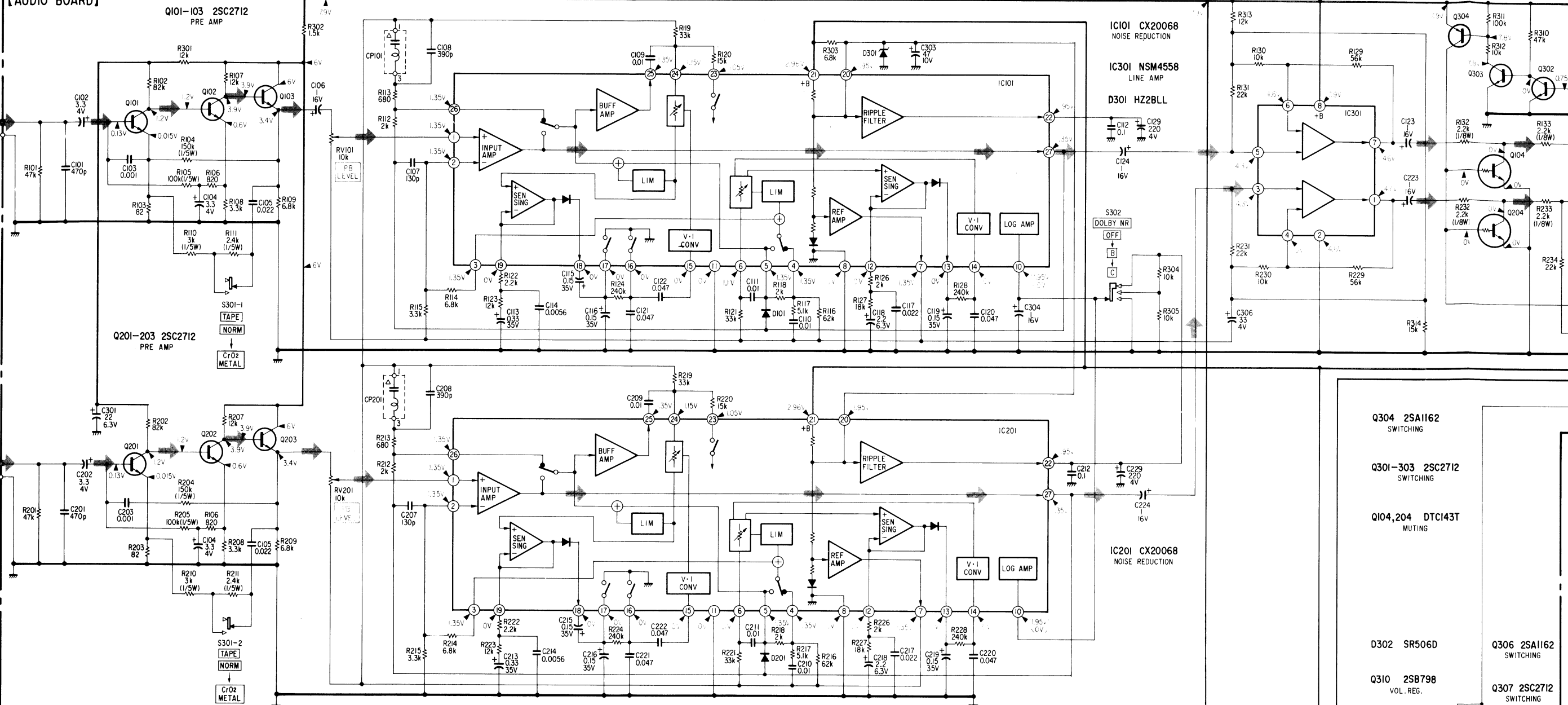
● Semiconductor Lead Layouts

2SC2712-G DTC143TK 2SD596	2SA1162	CX20068 CX20084
NJM4558M	TA7688F	MSM58141RS
1SS106 HZ2BLL	SR506D	RD7.5MB1

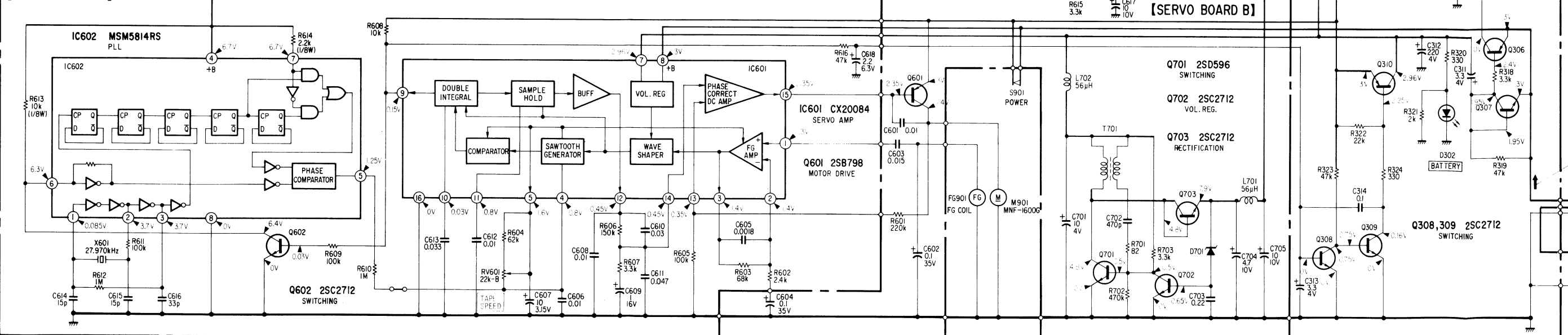
Q-IC	D
307	
306	
309	
308 310	
IC101	301
	101
201	
101	
202	
102	
203 IC301	201
103 IC201	
301 IC302	
304 302	
104	303
204	
	302
305	

5-2. SCHEMATIC DIAGRAM

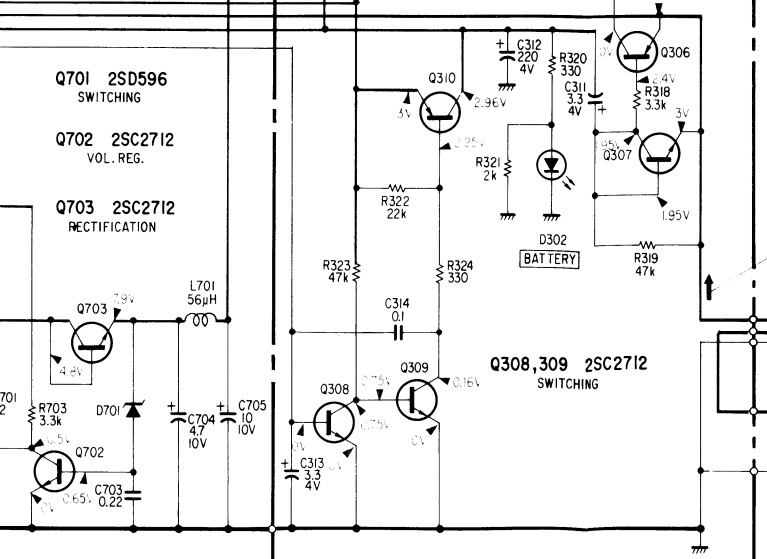
[AUDIO BOARD]

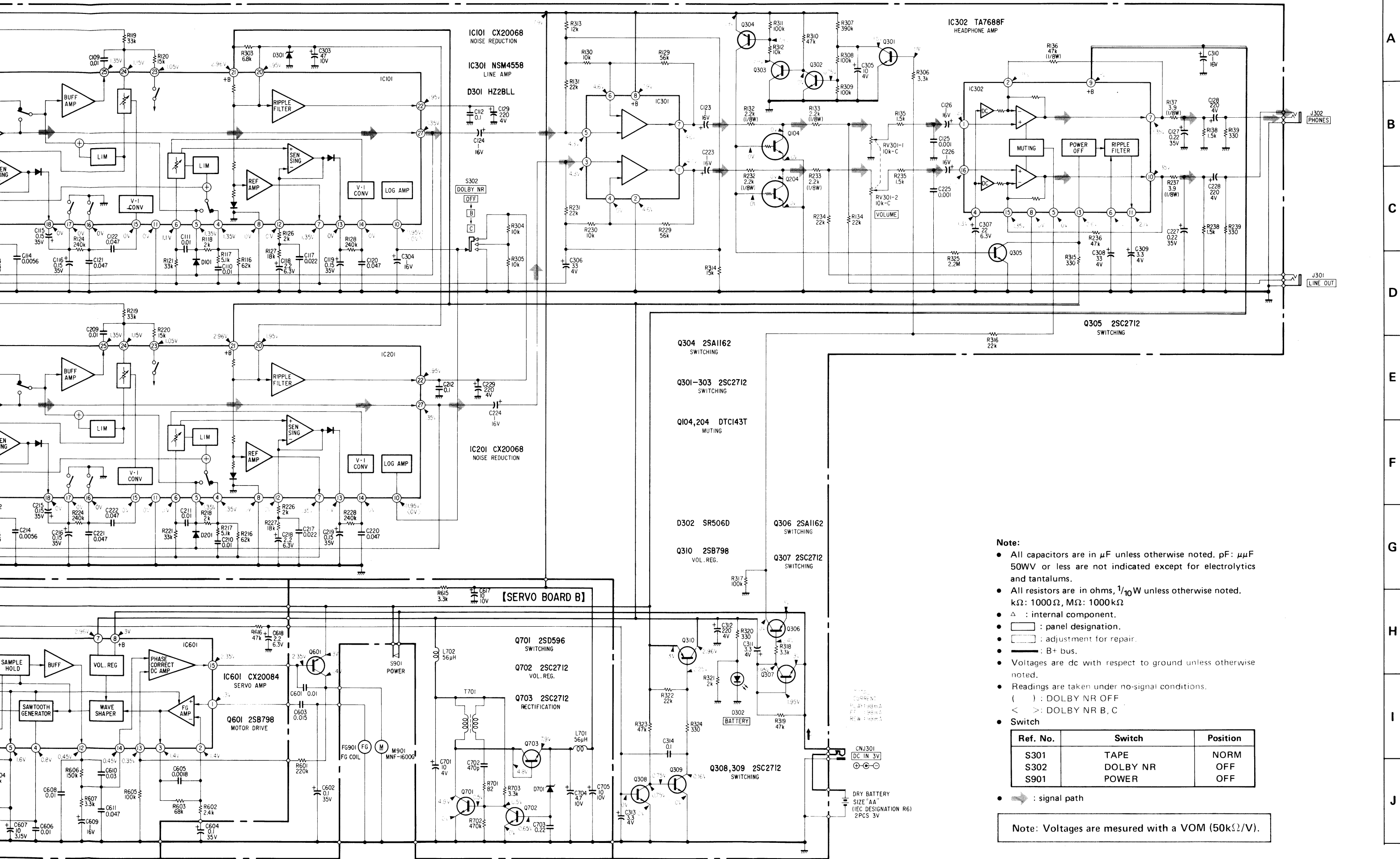


[SERVO BOARD A]

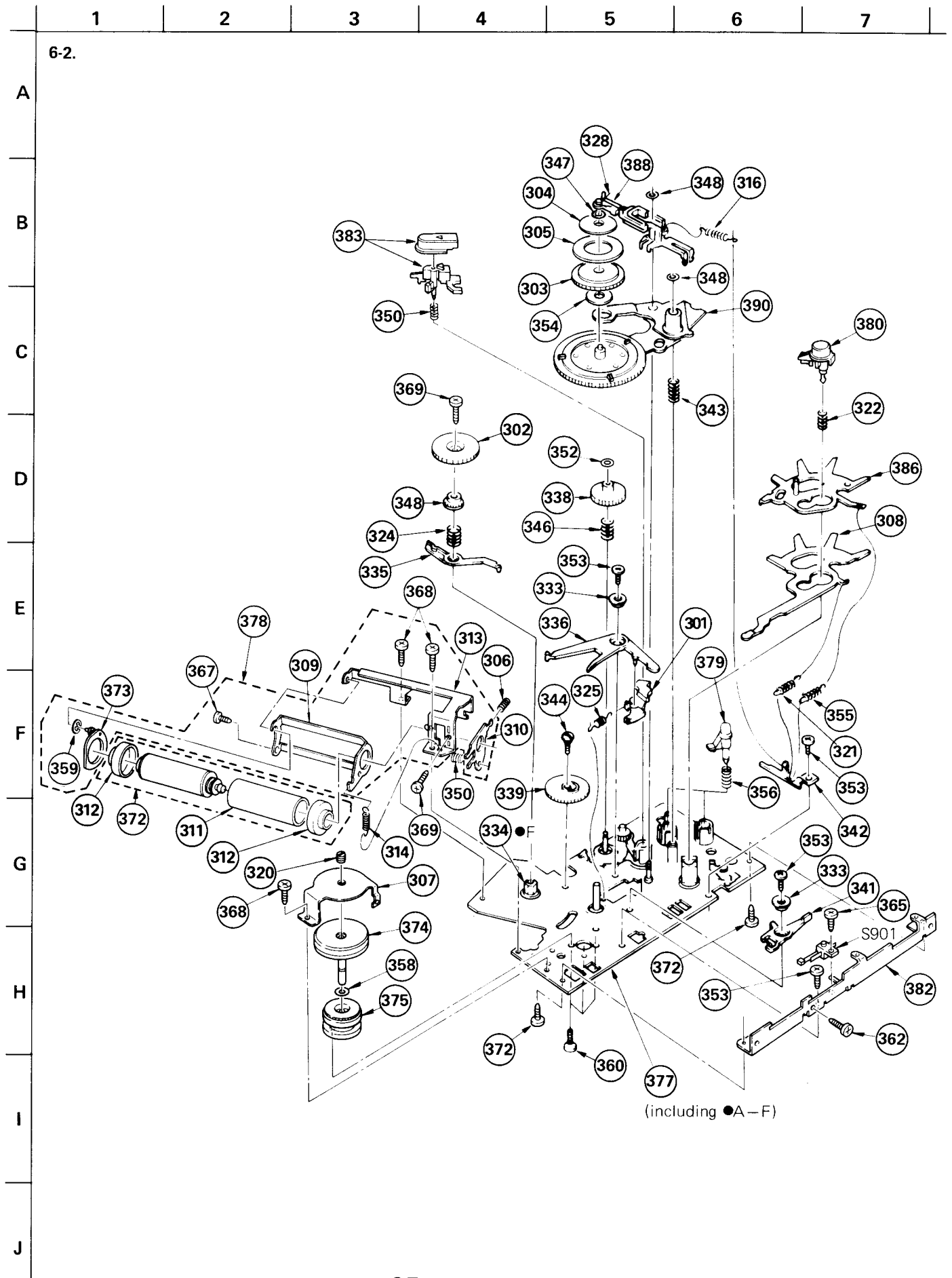
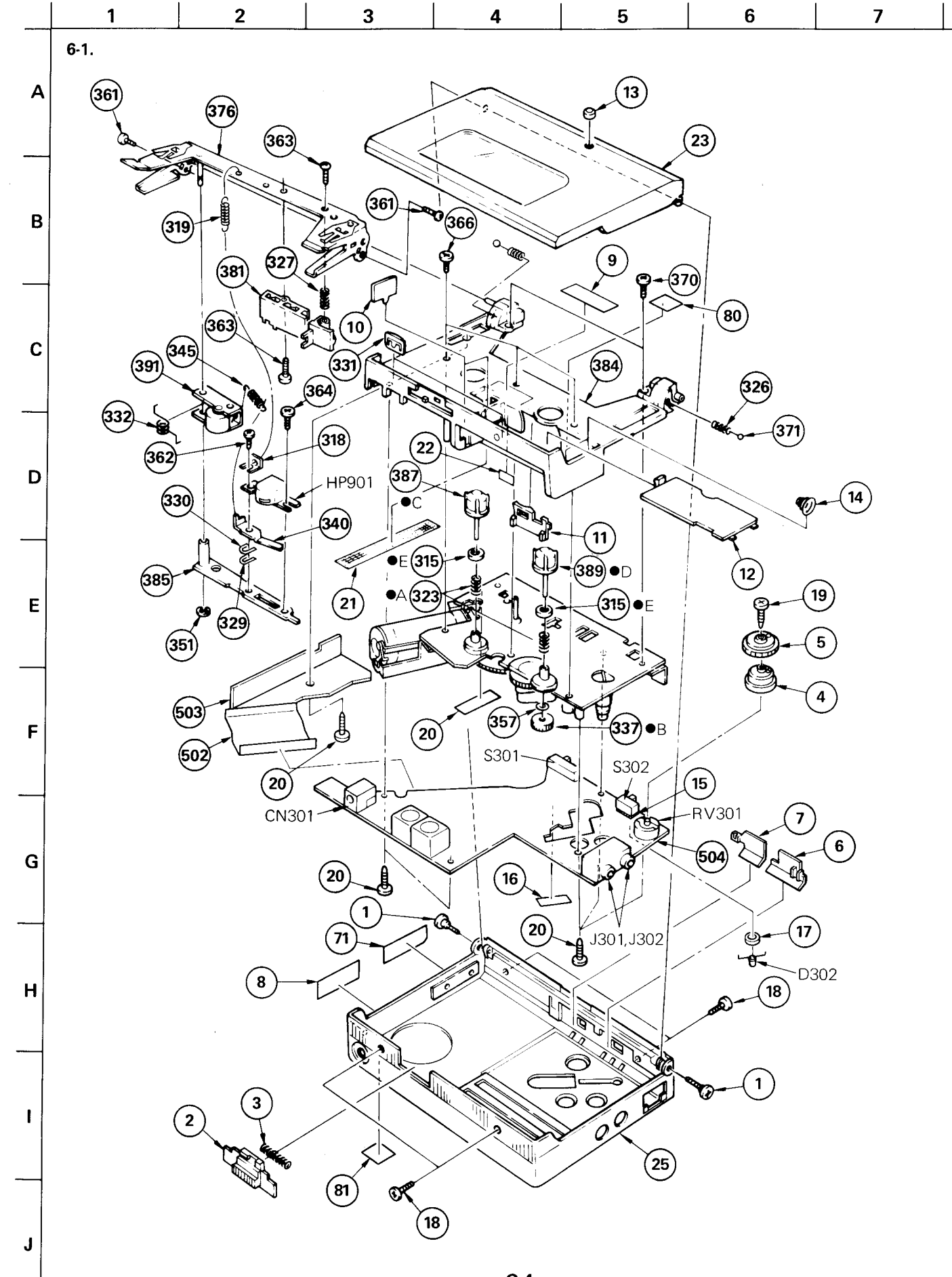


[SERVO BOARD B]



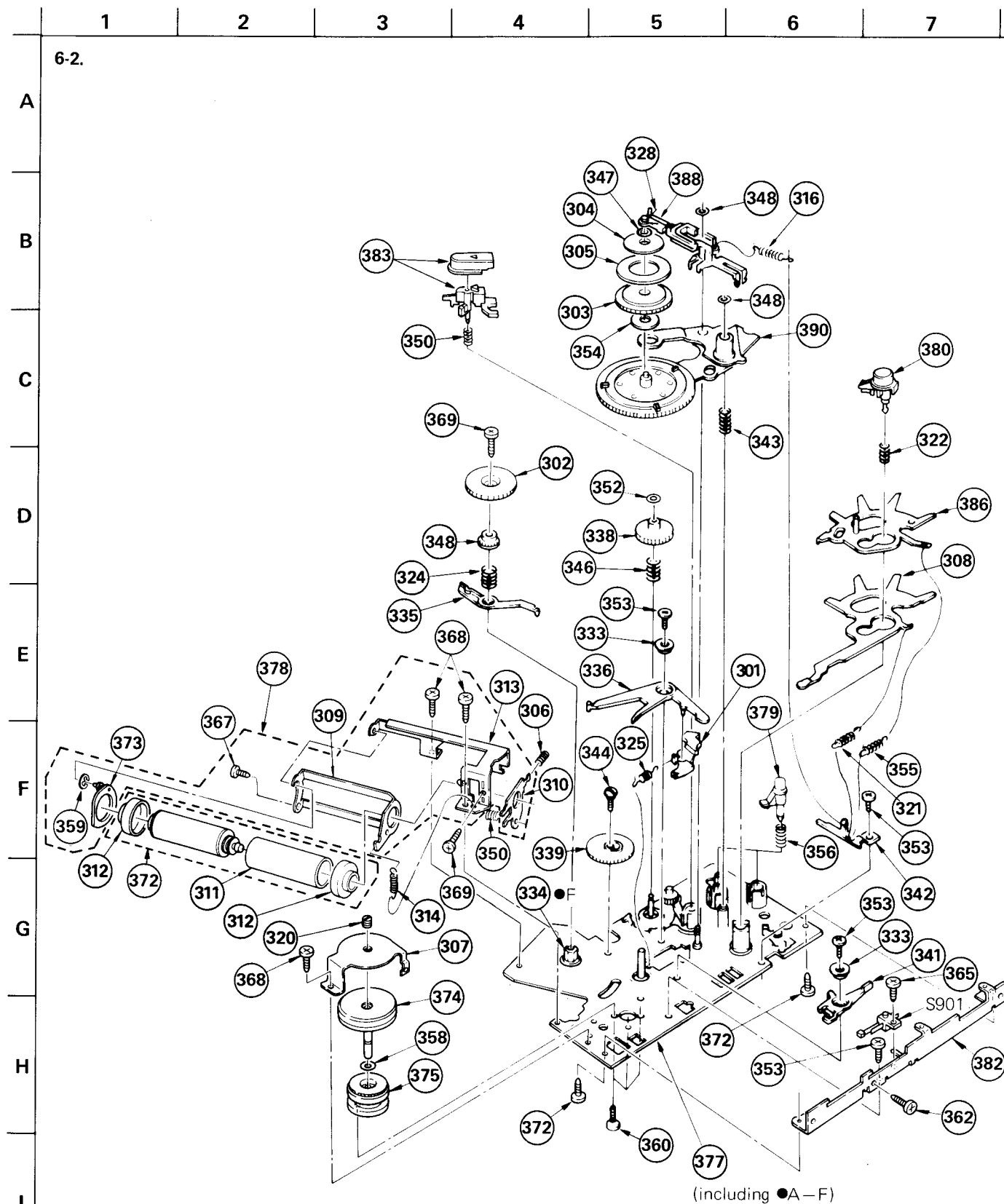


SECTION 6
EXPLODED VIEWS AND PARTS LIST



No.	Part
1	3-
2	3-
3	3-
4	3-
5	3-
6	3-
7	3-
8	3-
9	3-
10	3-
11	3-
12	3-
13	3-
14	3-
15	3-
16	3-
17	4-
18	7-
19	7-
20	7-
21	9-
22	9-
23	X-
24	X-
25	X-

NOTE:
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GENERAL SECTION			MECHANISM SECTION		
No.	Part No.	Description	No.	Part No.	Description
1	3-307-831-00	SCREW, PANEL	301	3-305-509-00	LEVER (A), SHUT-OFF
2	3-307-833-01	BUTTON, LOCK	302	3-310-914-00	GEAR, FWD
3	3-310-947-00	SPRING, COMPRESSION	303	3-310-915-11	GEAR (B), DRIVING
4	3-318-507-01	KNOB, CONTROL INDICATION	304	3-310-916-00	PLATE (B), HYSTERESIS
5	3-318-508-01	KNOB, CONTROL ORNAMENTAL	305	3-310-920-00	PLATE (C), HYSTERESIS
6	3-318-513-01	BUTTON, NR SELECTION	306	3-310-921-00	SPRING, COMPRESSION
7	3-318-514-01	BUTTON, TAPE SELECTION	307	3-310-930-00	PLATE, THRUST
8	3-318-522-01	LABEL, DOLBY	308	3-310-935-00	LEVER, SWITCH
9	3-578-101-00	PLATE, ORNAMENTAL	309	3-310-936-00	BRACKET, MOTOR
10	3-578-109-00	CONTACT	310	3-310-937-00	PLATE (A), SIDE, MOTOR
11	3-578-114-00	PANEL, CHASSIS	311	3-310-938-00	PLATE, SHIELD
12	3-578-115-00	LID, BATTERY CASE	312	3-310-939-00	RUBBER, VIBRATION PROOF
13	3-578-232-21	ORNAMENT, ADJUSTMENT HOLE	313	3-310-942-00	RETAINER, MOTOR
14	3-578-236-00	SPRING	314	3-310-948-00	SPRING, TENSION
15	3-578-260-00	SPACER	315	3-310-958-00	WASHER
16	3-831-441-XX	CUSHION	316	3-310-959-00	SPRING, TENSION
17	4-886-543-00	TUBE, CUSHION	317		
18	7-627-551-28	SCREW, PRECISION +P 1.4X2.5	318	3-310-971-01	HOOK, SPRING
19	7-627-552-47	SCREW, PRECISION +P 1.7X4	319	3-545-588-00	SPRING, TENSION
20	7-627-850-57	SCREW, PRECISION +P 1.4X3.5	320	3-547-625-00	SCREW, THRUST ADJUST
21	9-911-816-01	CLOTH, DRAWER, BATTERY	321	3-561-627-00	SPRING, TENSION
22	9-911-838-XX	CUSHION, METER	322	3-578-121-00	SPRING, COMPRESSION
23	X-3318-501-1	PANEL ASSY, CASSETTE	323	3-578-123-00	SPRING, COMPRESSION
24	X-3318-502-1	(Canadian,AEP,E,UK)...PANEL ASSY, CONTROL	324	3-578-124-00	SPRING, COMPRESSION
25	X-3318-503-0	(US)...PANEL ASSY, CONTROL	325	3-578-126-00	SPRING, TENSION
ACCESSORY & PACKING MATERIAL			326	3-578-127-00	SPRING, COMPRESSION
Part No.	Description		327	3-578-128-00	SPRING, COMPRESSION
3-318-509-01	LABEL, MODEL NUMBER		328	3-578-130-00	SPRING
3-318-516-01	CASE, CARRYING		329	3-578-138-01	SEAM (t=0.1)
3-318-523-01	SPACER		330	3-578-138-11	SEAM (t=0.2)
3-318-524-01	CUSHION		331	3-578-141-00	SPRING
3-318-525-01	INDIVIDUAL CARTON		332	3-578-146-00	SPRING
3-318-529-01	(US).....LABEL, UPC		333	3-578-149-00	SHAFT, LEVER (A), SHUT-OFF
3-570-631-61	BAG, POLYETHYLENE (FOR CARRYING CASE)		334	3-578-151-00	SHAFT, GEAR, FWD
3-701-622-00	BAG, POLYETHYLENE N-FH (FOR MANUAL)		335	3-578-154-00	LEVER, DETECTION
3-701-627-00	BAG, POLYETHYLENE (FOR HEADPHONE)		336	3-578-157-00	LEVER (B), SHUT-OFF
3-701-999-00	LABEL, SERIAL NUMBER		337	3-578-158-00	GEAR, S
3-703-707-01	STICKER, SONY SYMBOL (21)		338	3-578-162-00	GEAR, REW
3-773-812-11	(Canadian,AEP,UK,E)...MANUAL, INSTRUCTION		339	3-578-178-00	GEAR, SHUT-OFF
3-773-812-21	(US).....MANUAL, INSTRUCTION		340	3-578-181-00	SPRING
3-773-812-41	(AEP,E)...MANUAL, INSTRUCTION		341	3-578-183-00	LEVER, RETURN, S
3-795-748-21	(US)....SAFETY INSTRUCTIONS, HEADPHONE		342	3-578-196-00	HOOK, SPRING
8-951-173-90	HEADPHONES, MDR-40L		343	3-578-199-00	SPRING, COMPRESSION
X-3310-027-0	BELT ASSY, SHOULDER		344	3-578-214-00	SHAFT, GEAR, SHUT-OFF
			345	3-578-220-00	SPRING, TENSION

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (A-AAA-AAA-XX or A-AAA-AAA-X) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

All capacitors are in μ F. Common capacitors are omitted. Refer to the following lists for their part numbers.
MF: μ F, PF: μ F.

COILS

MMH : mH, UH : μ H

SEMICONDUCTORS

In each case, U : μ , for example:
UA.... : μ A...., UPA.... : μ PA...., UPC.... : μ PC, UPD.... : μ PD....

MECHANISM SECTION

No.	Part No.	Description
346	3-578-221-00	SPRING, COMPRESSION
347	3-578-224-00	WASHER
348	3-578-224-11	WASHER
348	3-578-244-01	GEAR, FF
350	3-578-249-00	SPRING, COMPRESSION (FWD BUTTON)
351	3-578-254-00	RING, RETAINING, E1.2
352	3-578-265-00	WASHER
353	3-578-267-00	SCREW (+P1.4X1.6), PRECISION
354	3-578-276-11	WASHER
355	3-578-277-00	SPRING, TENSION
356	3-578-278-00	SPRING, COMPRESSION
357	3-701-437-11	WASHER
358	3-701-438-01	WASHER
359	7-624-102-04	STOP RING 1.5, TYPE-E'
360	7-627-451-87	SCREW, PRECISION +K 1.4X2.2
361	7-627-551-28	SCREW, PRECISION +P 1.4X2.5
362	7-627-553-37	SCREW, PRECISION +P 2X3
363	7-627-553-98	SCREW, PRECISION +P 2X8
364	7-627-554-17	SCREW, PRECISION +P 2X3.5
365	7-627-850-18	SCREW, PRECISION +P 1.4X2.5
366	7-627-850-48	+P 1.4X1.6
367	7-627-850-77	SCREW, PRECISION +P 1.4X1.8
368	7-627-850-78	SCREW, PRECISION +P 1.4X1.8
369	7-627-851-17	SCREW, PRECISION +P 1.4X4.5
370	7-627-851-27	SCREW, PRECISION +P 1.4X5
371	7-671-112-01	STEEL BALL
372	X-3310-922-1	MOTOR ASSY (INCLUDING M901)
373	X-3310-903-0	PLATE (B) ASSY, SIDE
374	X-3310-905-0	ROTOR ASSY
375	X-3310-907-0	STATOR ASSY
376	X-3310-908-0	HOLDER ASSY
377	•X-3310-909-0	CHASSIS ASSY, SUB
378	X-3310-932-1	MOTOR BRACKET ASSY
379	X-3310-933-1	BUTTON ASSY, F.R
380	X-3310-934-1	BUTTON ASSY, STOP
381	X-3310-935-1	COVER ASSY, ERASE HEAD
382	X-3310-936-1	BRACKET ASSY, PANEL
383	X-3310-937-1	BUTTON ASSY, PLAY
384	X-3310-938-1	CHASSIS ASSY
385	•X-3578-105-0	CHASSIS ASSY, HEAD
386	X-3578-114-0	PLATE ASSY, LOCK
387	X-3578-115-0	CLAW ASSY, REEL
388	X-3578-121-0	LEVER ASSY, FWD
389	X-3578-126-0	CLAW ASSY, REEL
390	X-3578-132-0	LEVER (A) ASSY, DRIVING
391	X-3578-137-0	PINCH ROLLER ASSY

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
501	•1-535-511-11	FRAME, LEAD (F TYPE)		
502	1-612-254-11	PC BOARD, CONNECTION		
503	A-3015-252-A	SERVO UNIT		
504	A-3070-124-A	MOUNTED PCB, AUDIO		
C101	1-163-005-00	CERAMIC CHIP 470PF	10%	50V
C102	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V
C103	1-163-009-00	CERAMIC CHIP 0.001MF	10%	50V
C104	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V
C105	1-130-487-00	MYLAR 0.022MF	5%	50V
C106	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C107	1-163-120-00	CERAMIC CHIP 130PF	5%	50V
C108	1-163-004-00	CERAMIC CHIP 390PF	10%	50V
C109	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C110	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C111	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C112	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C113	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V
C114	1-163-018-00	CERAMIC CHIP 0.0056MF	10%	50V
C115	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V
C116	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V
C117	1-163-037-00	CERAMIC CHIP 0.022MF	10%	25V
C118	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V
C119	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V
C120	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V
C121	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V
C122	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V
C123	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C124	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C125	1-163-047-00	CERAMIC CHIP 0.001MF	10%	50V
C126	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C127	1-135-072-21	TANTAL. CHIP 0.22MF	20%	35V
C128	1-123-827-00	ELECT 220MF	20%	4V
C129	1-123-827-00	ELECT 220MF	20%	4V
C201	1-163-005-00	CERAMIC CHIP 470PF	10%	50V
C202	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V
C203	1-163-009-00	CERAMIC CHIP 0.001MF	10%	50V
C204	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V
C205	1-130-487-00	MYLAR 0.022MF	5%	50V
C206	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C207	1-163-120-00	CERAMIC CHIP 130PF	5%	50V
C208	1-163-004-00	CERAMIC CHIP 390PF	10%	50V
C209	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C210	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C211	1-163-021-00	CERAMIC CHIP 0.01MF	5%	50V
C212	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C213	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V

NOTE:

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- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF, PF: μμF.

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

- In each case, U : μ, for example:
UA.... : μA...., UPA.... : μPA...., UPC.... : μPC,
UPD.... : μPD....

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C214	1-163-018-00	CERAMIC CHIP 0.0056MF	10%	50V	
C215	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V	
C216	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V	
C217	1-163-037-00	CERAMIC CHIP 0.022MF	10%	25V	
C218	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V	
C219	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V	
C220	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V	
C221	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V	
C222	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V	
C223	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C224	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C225	1-163-047-00	CERAMIC CHIP 0.001MF	10%	50V	
C226	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C227	1-135-072-21	TANTAL. CHIP 0.22MF	20%	35V	
C228	1-123-827-00	ELECT 220MF	20%	4V	
C229	1-123-827-00	ELECT 220MF	20%	4V	
C301	1-135-101-21	TANTAL. CHIP 22MF	20%	6.3V	
C302	1-135-101-21	TANTAL. CHIP 22MF	20%	6.3V	
C303	1-135-098-21	TANTAL. CHIP 47MF	20%	10V	
C304	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C305	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C306	1-135-105-00	TANTAL. CHIP 33MF	20%	4V	
C307	1-135-101-21	TANTAL. CHIP 22MF	20%	6.3V	
C308	1-135-105-00	TANTAL. CHIP 33MF	20%	4V	
C309	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V	
C310	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C311	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V	
C312	1-123-827-00	ELECT 220MF	20%	4V	
C313	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V	
C314	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C315	1-162-282-31	CERAMIC 100PF	10%	50V	
C601	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C602	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V	
C603	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	
C604	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V	
C605	1-163-012-00	CERAMIC CHIP 0.0018MF	10%	50V	
C606	1-130-483-00	MYLAR 0.01MF	5%	50V	
C607	1-131-389-00	TANTALUM 10MF	20%	3.15V	
C608	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C609	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C610	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C611	1-163-080-00	CERAMIC CHIP 0.047MF	10%	25V	
C612	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C613	1-130-489-00	MYLAR 0.033MF	5%	50V	
C614	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C615	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	
C616	1-163-105-00	CERAMIC CHIP 33PF	5%	50V	
C617	1-131-377-00	TANTALUM 10MF	20%	10V	
C618	1-135-099-00	TANTAL. CHIP 2.2MF	20%	6.3V	
C701	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C702	1-163-005-00	CERAMIC CHIP 470PF	10%	50V	
C703	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C704	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C705	1-131-377-00	TANTALUM 10MF	20%	10V	
CNJ301	1-507-723-00	JACK, EXTENTION POWER			
CP101	1-235-318-11	FILTER, SP-SK			
CP201	1-235-318-11	FILTER, SP-SK			
D101	8-719-911-06	DIODE 1SS106			
D201	8-719-911-06	DIODE 1SS106			
D301	8-719-921-12	DIODE HZ2BLL			
D302	8-719-104-37	DIODE SR506D			
D701	8-719-106-22	DIODE RD7.5M-B1			
HP901	8-825-576-10	HEAD (PA263-3602)			
IC101	8-752-006-80	IC CX20068			
IC201	8-752-006-80	IC CX20068			
IC301	8-759-700-43	IC NJM4558M			
IC302	8-759-200-95	IC TA7688F			
IC601	8-759-909-45	IC CX20084			
IC602	8-759-958-14	IC MSM58141RS			
J301	1-507-727-21	JACK 2P (LINE OUT-L)			
J302	1-507-727-21	JACK 2P (LINE OUT-R)			
JR1	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR2	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR3	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR4	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR5	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR6	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR7	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR8	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR9	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR10	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR11	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR14	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR15	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR16	1-216-295-00	METAL CHIP 0	5%	1/10W	
JR18	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR19	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR20	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR21	1-216-296-00	METAL CHIP 0	5%	1/8W	

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CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF:μF, PF:μμF.

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

- In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description
JR22	1-216-296-00	METAL CHIP 0 5% 1/8W
JR23	1-216-296-00	METAL CHIP 0 5% 1/8W
JR24	1-216-296-00	METAL CHIP 0 5% 1/8W
JR25	1-216-296-00	METAL CHIP 0 5% 1/8W
JR26	1-216-296-00	METAL CHIP 0 5% 1/8W
JR27	1-216-296-00	METAL CHIP 0 5% 1/8W
JR28	1-216-296-00	METAL CHIP 0 5% 1/8W
JR29	1-216-296-00	METAL CHIP 0 5% 1/8W
JR30	1-216-296-00	METAL CHIP 0 5% 1/8W
JR31	1-216-296-00	METAL CHIP 0 5% 1/8W
JR32	1-216-296-00	METAL CHIP 0 5% 1/8W
JR33	1-216-296-00	METAL CHIP 0 5% 1/8W
JR34	1-216-296-00	METAL CHIP 0 5% 1/8W
JR35	1-216-296-00	METAL CHIP 0 5% 1/8W
JR36	1-216-296-00	METAL CHIP 0 5% 1/8W
JR37	1-216-296-00	METAL CHIP 0 5% 1/8W
JR38	1-216-296-00	METAL CHIP 0 5% 1/8W
JR39	1-216-296-00	METAL CHIP 0 5% 1/8W
JR40	1-216-296-00	METAL CHIP 0 5% 1/8W
JR41	1-216-296-00	METAL CHIP 0 5% 1/8W
JR42	1-216-296-00	METAL CHIP 0 5% 1/8W
JR601	1-216-295-00	METAL CHIP 0 5% 1/10W
JR602	1-216-295-00	METAL CHIP 0 5% 1/10W
JR603	1-216-296-00	METAL CHIP 0 5% 1/8W
L701	1-408-946-00	INDUCTOR CHIP 56UH
L702	1-408-946-00	INDUCTOR CHIP 56UH
M901	INCLUDED IN MECHA No.372	
Q101	8-729-271-22	TRANSISTOR 2SC2712-G
Q102	8-729-271-22	TRANSISTOR 2SC2712-G
Q103	8-729-271-22	TRANSISTOR 2SC2712-G
Q104	8-729-900-98	TRANSISTOR DTC143TK
Q201	8-729-271-22	TRANSISTOR 2SC2712-G
Q202	8-729-271-22	TRANSISTOR 2SC2712-G
Q203	8-729-271-22	TRANSISTOR 2SC2712-G
Q204	8-729-900-98	TRANSISTOR DTC143TK
Q301	8-729-271-22	TRANSISTOR 2SC2712-G
Q302	8-729-271-22	TRANSISTOR 2SC2712-G
Q303	8-729-271-22	TRANSISTOR 2SC2712-G
Q304	8-729-271-22	TRANSISTOR 2SA1162-G
Q305	8-729-271-22	TRANSISTOR 2SC2712-G
Q306	8-729-271-22	TRANSISTOR 2SA1162-G
Q307	8-729-271-22	TRANSISTOR 2SC2712-G
Q308	8-729-271-22	TRANSISTOR 2SC2712-G
Q309	8-729-271-22	TRANSISTOR 2SC2712-G
Q310	8-729-101-07	TRANSISTOR 2SB798

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q601	8-729-101-07	TRANSISTOR 2SB798
Q602	8-729-271-22	TRANSISTOR 2SC2712-G
Q701	8-729-159-64	TRANSISTOR 2SD596
Q702	8-729-271-22	TRANSISTOR 2SC2712-G
Q703	8-729-271-22	TRANSISTOR 2SC2712-G
R101	1-216-089-00	METAL CHIP 47K 5% 1/10W
R102	1-216-095-00	METAL CHIP 82K 5% 1/10W
R103	1-216-023-00	METAL CHIP 82 5% 1/10W
R104	1-247-883-00	CARBON MELF 150K 5% 1/5W
R105	1-247-879-00	CARBON MELF 100K 5% 1/5W
R106	1-216-047-00	METAL CHIP 820 5% 1/10W
R107	1-216-075-00	METAL CHIP 12K 5% 1/10W
R108	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
R109	1-216-069-00	METAL CHIP 6.8K 5% 1/10W
R110	1-247-842-00	CARBON MELF 3K 5% 1/5W
R111	1-247-840-00	CARBON MELF 2.4K 5% 1/5W
R112	1-216-056-00	METAL CHIP 2K 5% 1/10W
R113	1-216-045-00	METAL CHIP 680 5% 1/10W
R114	1-216-069-00	METAL CHIP 6.8K 5% 1/10W
R115	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
R116	1-216-092-00	METAL CHIP 62K 5% 1/10W
R117	1-216-066-00	METAL CHIP 5.1K 5% 1/10W
R118	1-216-056-00	METAL CHIP 2K 5% 1/10W
R119	1-216-085-00	METAL CHIP 33K 5% 1/10W
R120	1-216-077-00	METAL CHIP 15K 5% 1/10W
R121	1-216-085-00	METAL CHIP 33K 5% 1/10W
R122	1-216-057-00	METAL CHIP 2.2K 5% 1/10W
R123	1-216-075-00	METAL CHIP 12K 5% 1/10W
R124	1-216-106-00	METAL CHIP 240K 5% 1/10W
R125	1-216-056-00	METAL CHIP 2K 5% 1/10W
R126	1-216-056-00	METAL CHIP 2K 5% 1/10W
R127	1-216-079-00	METAL CHIP 18K 5% 1/10W
R128	1-216-106-00	METAL CHIP 240K 5% 1/10W
R129	1-216-091-00	METAL CHIP 56K 5% 1/10W
R130	1-216-073-00	METAL CHIP 10K 5% 1/10W
R131	1-216-081-00	METAL CHIP 22K 5% 1/10W
R132	1-216-206-00	METAL CHIP 2.2K 5% 1/8W
R133	1-216-057-00	METAL CHIP 2.2K 5% 1/10W
R134	1-216-081-00	METAL CHIP 22K 5% 1/10W
R135	1-216-053-00	METAL CHIP 1.5K 5% 1/10W
R136	1-216-238-00	METAL CHIP 47K 5% 1/8W
R137	1-216-140-00	METAL CHIP 3.9 5% 1/8W
R138	1-216-053-00	METAL CHIP 1.5K 5% 1/10W
R139	1-216-037-00	METAL CHIP 330 5% 1/10W

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF:μF, PF:pμF.

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

- In each case, U : μ, for example:
UA....: μA..., UPA....: μPA..., UPC....: μPC,
UPD....: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R201	1-216-089-00	METAL CHIP	47K	5%	1/10W
R202	1-216-095-00	METAL CHIP	82K	5%	1/10W
R203	1-216-023-00	METAL CHIP	82	5%	1/10W
R204	1-247-883-00	CARBON MELF	150K	5%	1/5W
R205	1-247-879-00	CARBON MELF	100K	5%	1/5W
R206	1-216-047-00	METAL CHIP	820	5%	1/10W
R207	1-216-075-00	METAL CHIP	12K	5%	1/10W
R208	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R209	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R210	1-247-842-00	CARBON MELF	3K	5%	1/5W
R211	1-247-840-00	CARBON MELF	2.4K	5%	1/5W
R212	1-216-056-00	METAL CHIP	2K	5%	1/10W
R213	1-216-045-00	METAL CHIP	680	5%	1/10W
R214	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R215	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R216	1-216-241-00	METAL CHIP	62K	5%	1/8W
R217	1-216-215-00	METAL CHIP	5.1K	5%	1/8W
R218	1-216-056-00	METAL CHIP	2K	5%	1/10W
R219	1-216-085-00	METAL CHIP	33K	5%	1/10W
R220	1-216-077-00	METAL CHIP	15K	5%	1/10W
R221	1-216-085-00	METAL CHIP	33K	5%	1/10W
R222	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R223	1-216-075-00	METAL CHIP	12K	5%	1/10W
R224	1-216-106-00	METAL CHIP	240K	5%	1/10W
R225	1-216-056-00	METAL CHIP	2K	5%	1/10W
R226	1-216-205-00	METAL CHIP	2K	5%	1/8W
R227	1-216-079-00	METAL CHIP	18K	5%	1/10W
R228	1-216-106-00	METAL CHIP	240K	5%	1/10W
R229	1-216-091-00	METAL CHIP	56K	5%	1/10W
R230	1-216-073-00	METAL CHIP	10K	5%	1/10W
R231	1-216-081-00	METAL CHIP	22K	5%	1/10W
R232	1-216-206-00	METAL CHIP	2.2K	5%	1/8W
R233	1-216-206-00	METAL CHIP	2.2K	5%	1/8W
R234	1-216-081-00	METAL CHIP	22K	5%	1/10W
R235	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R236	1-216-089-00	METAL CHIP	47K	5%	1/10W
R237	1-216-140-00	METAL CHIP	3.9	5%	1/8W
R238	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R239	1-216-037-00	METAL CHIP	330	5%	1/10W
R301	1-216-075-00	METAL CHIP	12K	5%	1/10W
R302	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R303	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R304	1-216-073-00	METAL CHIP	10K	5%	1/10W
R305	1-216-073-00	METAL CHIP	10K	5%	1/10W
R306	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R307	1-216-111-00	METAL CHIP	390K	5%	1/10W

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R308	1-216-097-00	METAL CHIP	100K	5%	1/10W
R309	1-216-097-00	METAL CHIP	100K	5%	1/10W
R310	1-216-089-00	METAL CHIP	47K	5%	1/10W
R311	1-216-097-00	METAL CHIP	100K	5%	1/10W
R312	1-216-073-00	METAL CHIP	10K	5%	1/10W
R313	1-216-075-00	METAL CHIP	12K	5%	1/10W
R314	1-216-077-00	METAL CHIP	15K	5%	1/10W
R315	1-216-037-00	METAL CHIP	330	5%	1/10W
R316	1-216-081-00	METAL CHIP	22K	5%	1/10W
R317	1-216-097-00	METAL CHIP	100K	5%	1/10W
R318	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R319	1-216-089-00	METAL CHIP	47K	5%	1/10W
R320	1-216-037-00	METAL CHIP	330	5%	1/10W
R321	1-216-056-00	METAL CHIP	2K	5%	1/10W
R322	1-216-081-00	METAL CHIP	22K	5%	1/10W
R323	1-216-089-00	METAL CHIP	47K	5%	1/10W
R324	1-216-037-00	METAL CHIP	330	5%	1/10W
R325	1-216-278-00	METAL CHIP	2.2M	5%	1/8W
R601	1-216-254-00	METAL CHIP	220K	5%	1/8W
R602	1-216-058-00	METAL CHIP	2.4K	5%	1/10W
R603	1-216-093-00	METAL CHIP	68K	5%	1/10W
R604	1-216-092-00	METAL CHIP	62K	5%	1/10W
R605	1-216-097-00	METAL CHIP	100K	5%	1/10W
R606	1-216-101-00	METAL CHIP	150K	5%	1/10W
R607	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R608	1-216-073-00	METAL CHIP	10K	5%	1/10W
R609	1-216-097-00	METAL CHIP	100K	5%	1/10W
R610	1-216-121-00	METAL CHIP	1M	5%	1/10W
R611	1-216-097-00	METAL CHIP	100K	5%	1/10W
R612	1-216-121-00	METAL CHIP	1M	5%	1/10W
R613	1-216-073-00	METAL CHIP	10K	5%	1/10W
R614	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R615	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R616	1-216-238-00	METAL CHIP	47K	5%	1/8W
R701	1-216-023-00	METAL CHIP	82	5%	1/10W
R702	1-216-113-00	METAL CHIP	470K	5%	1/10W
R703	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
RV101	1-228-591-00	RES, ADJ, METAL GLAZE 10K (PB LEVEL)			
RV201	1-228-591-00	RES, ADJ, METAL GLAZE 10K (PB LEVEL)			
RV301	1-228-598-00	RES, VAR, CARBON 10K/10K (HEADPHONE)			
RV601	1-228-356-00	RES, ADJ, METAL GLAZE 22K (SPEED)			
S301	1-553-280-00	SWITCH, SLIDE (TAPE)			
S302	1-552-642-00	SWITCH (DOLBY NR)			
S901	1-553-226-00	SWITCH, LEAF (POWER)			
T701	1-447-697-00	TRANSFORMER, DC-DC CONVERTER			
X601	1-567-260-11	VIBRATOR, CRYSTAL			

CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF , PF: μF .

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

- In each case, U : μ , for example:
 UA.... : μA ..., UPA.... : μPA ..., UPC.... : μPC ,
 UPD.... : μPD ...

Sony Corporation

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

SUPPLEMENT

File this Supplement with the Service Manual.

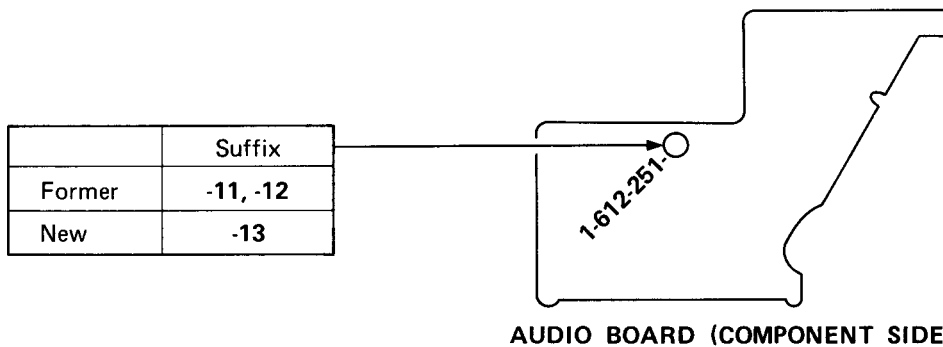
Subject: DOLBY IC (IC101, 201) CHANGE

No. 1
March, 1985

	(Former)	(New)
IC101, 201	CX20068	→ CX20218

Because of this change, audio board and the circuit around Dolby IC have been changed.

- New or former type can be identified by the part number suffix of audio board.



The mounting diagram and the schematic diagram for the audio board whose part number suffix is 13 are given in this supplement. As to the information for the audio board whose part number suffix is 11 or 12, see the service manual previously issued.

- CHANGED PARTS Page 2 — 3
- MOUNTING DIAGRAM Page 4 — 6
- SCHEMATIC DIAGRAM Page 7 — 9

STEREO CASSETTE-CORDER
SONY®

English
85C06135-1
Printed in Japan
© 1985

• CHANGED PARTS

Ref. No.	Former (PC Board Suffix-11,12)				New (PC Board Suffix-13)			
	Description				Part No.	Description		
C107	CERAMIC CHIP	130PF	5%	50V	1-163-121-00	CERAMIC CHIP	150PF	5% 50V
C108	CERAMIC CHIP	390PF	10%	50V	1-163-145-00	CERAMIC CHIP	0.0015 μ F	10% 50V
C114	CERAMIC CHIP	0.0056 μ F	10%	50V	1-163-020-00	CERAMIC CHIP	0.0082 μ F	10% 50V
C115	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-072-21	TANTAL. CHIP	0.22 μ F	10% 35V
C116	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-070-00	TANTAL. CHIP	0.1 μ F	10% 35V
C117	CERAMIC CHIP	0.022 μ F	10%	25V	1-163-024-00	CERAMIC CHIP	0.018 μ F	10% 50V
C118	TANTAL. CHIP	2.2 μ F	10%	6.3V	1-135-091-00	TANTAL. CHIP	1 μ F	10% 16V
C119	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-072-21	TANTAL. CHIP	0.22 μ F	10% 35V
C127	TANTAL. CHIP	0.22 μ F	20%	35V	1-163-081-00	CERAMIC CHIP	0.22 μ F	25V
C207	CERAMIC CHIP	130PF	5%	50V	1-163-121-00	CERAMIC CHIP	150PF	5% 50V
C208	CERAMIC CHIP	390PF	10%	50V	1-163-145-00	CERAMIC CHIP	0.0015 μ F	10% 50V
C214	CERAMIC CHIP	0.0056 μ F	10%	50V	1-163-020-00	CERAMIC CHIP	0.0082 μ F	10% 50V
C215	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-072-21	TANTAL. CHIP	0.22 μ F	10% 35V
C216	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-070-00	TANTAL. CHIP	0.1 μ F	10% 35V
C217	CERAMIC CHIP	0.022 μ F	10%	25V	1-163-024-00	CERAMIC CHIP	0.018 μ F	10% 50V
C218	TANTAL. CHIP	2.2 μ F	10%	6.3V	1-135-091-00	TANTAL. CHIP	1 μ F	10% 16V
C219	TANTAL. CHIP	0.15 μ F	10%	35V	1-135-072-21	TANTAL. CHIP	0.22 μ F	10% 35V
C227	TANTAL. CHIP	0.22 μ F	20%	35V	1-163-081-00	CERAMIC CHIP	0.22 μ F	25V
C303	TANTAL. CHIP	47 μ F	20%	10V	1-124-432-00	ELECT	47 μ F	20% 4V
C315					1-162-282-31	CERAMIC	100PF	10% 50V
C602	TANTAL. CHIP	0.1 μ F	10%	35V	1-163-077-00	CERAMIC CHIP	0.1 μ F	50V
C608	CERAMIC CHIP	0.01 μ F	10%	50V				
D101	DIODE	1SS106						
D201	DIODE	1SS106						
D301	DIODE	HZ2BLL						
IC101	IC	CX20068			8-752-021-80	IC	CX20218	
IC201	IC	CX20068			8-752-021-80	IC	CX20218	

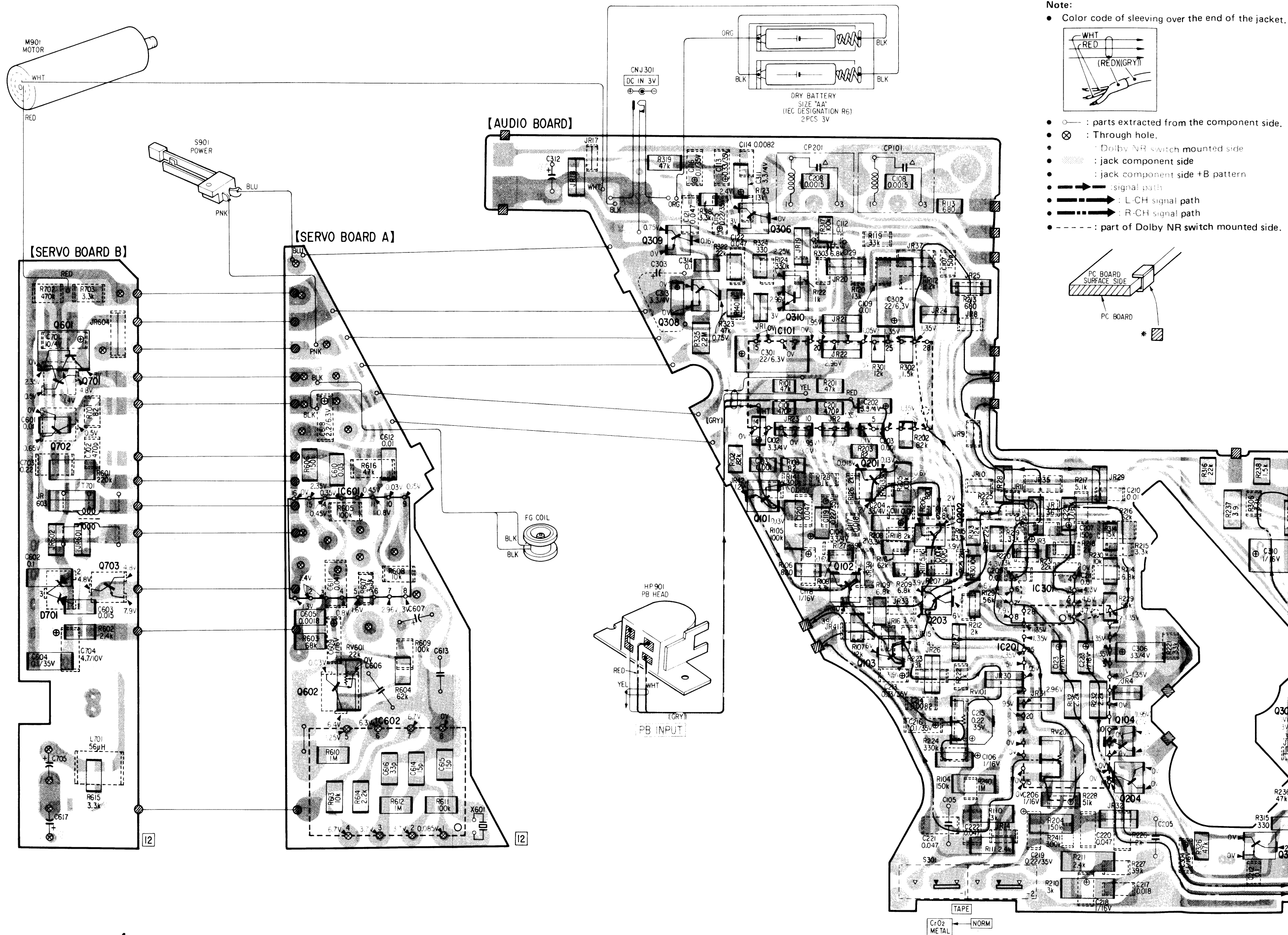
Ref. No.	Former (PC Board Suffix-11,12)				New (PC Board Suffix-13)			
	Description				Part No.	Description		
JR12	METAL CHIP	0	5%	1/10W				
JR13	METAL CHIP	0	5%	1/10W				
JR604					1-216-296-00	METAL CHIP	0	5% 1/8W
L702	INDUCTOR CHIP	56 μ H						
Q307	TRANSISTOR	2SC2712-G						
R120	METAL CHIP	15K Ω	5%	1/10W	1-216-076-00	METAL CHIP	13K Ω	5% 1/10W
R122	METAL CHIP	2.2K Ω	5%	1/10W	1-216-049-00	METAL CHIP	1K Ω	5% 1/10W
R123	METAL CHIP	12K Ω	5%	1/10W	1-216-076-00	METAL CHIP	13K Ω	5% 1/10W
R124	METAL CHIP	240K Ω	5%	1/10W	1-216-109-00	METAL CHIP	330K Ω	5% 1/10W
R125					1-216-056-00	METAL CHIP	2K Ω	5% 1/10W
R127	METAL CHIP	18K Ω	5%	1/10W	1-216-087-00	METAL CHIP	39K Ω	5% 1/10W
R128	METAL CHIP	240K Ω	5%	1/10W	1-216-090-00	METAL CHIP	51K Ω	5% 1/10W
R134	METAL CHIP	22K Ω	5%	1/10W	1-216-089-00	METAL CHIP	47K Ω	5% 1/10W
R140					1-216-121-00	METAL CHIP	1M Ω	5% 1/10W
R141					1-216-108-00	METAL CHIP	300K Ω	5% 1/10W
R220	METAL CHIP	15K Ω	5%	1/10W	1-216-076-00	METAL CHIP	13K Ω	5% 1/10W
R222	METAL CHIP	2.2K Ω	5%	1/10W	1-216-049-00	METAL CHIP	1K Ω	5% 1/10W
R223	METAL CHIP	12K Ω	5%	1/10W	1-216-076-00	METAL CHIP	13K Ω	5% 1/10W
R224	METAL CHIP	240K Ω	5%	1/10W	1-216-109-00	METAL CHIP	330K Ω	5% 1/10W
R225					1-216-056-00	METAL CHIP	2K Ω	5% 1/10W
R227	METAL CHIP	18K Ω	5%	1/10W	1-216-087-00	METAL CHIP	39K Ω	5% 1/10W
R228	METAL CHIP	240K Ω	5%	1/10W	1-216-090-00	METAL CHIP	51K Ω	5% 1/10W
R234	METAL CHIP	22K Ω	5%	1/10W	1-216-089-00	METAL CHIP	47K Ω	5% 1/10W
R240					1-216-121-00	METAL CHIP	1M Ω	5% 1/10W
R241					1-216-108-00	METAL CHIP	300K Ω	5% 1/10W
R326					1-216-089-00	METAL CHIP	47K Ω	5% 1/10W
R601	METAL CHIP	220K Ω	5%	1/10W	1-216-254-00	METAL CHIP	220K Ω	5% 1/8W
R613	METAL CHIP	10K Ω	5%	1/8W	1-216-073-00	METAL CHIP	10K Ω	5% 1/10W

MOUNTING DIAGRAM

A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Q · IC	D
601	
701	
702	
IC601	
703	701
602	
IC602	



A

B

C

D

E

F

A

B

C

D

E

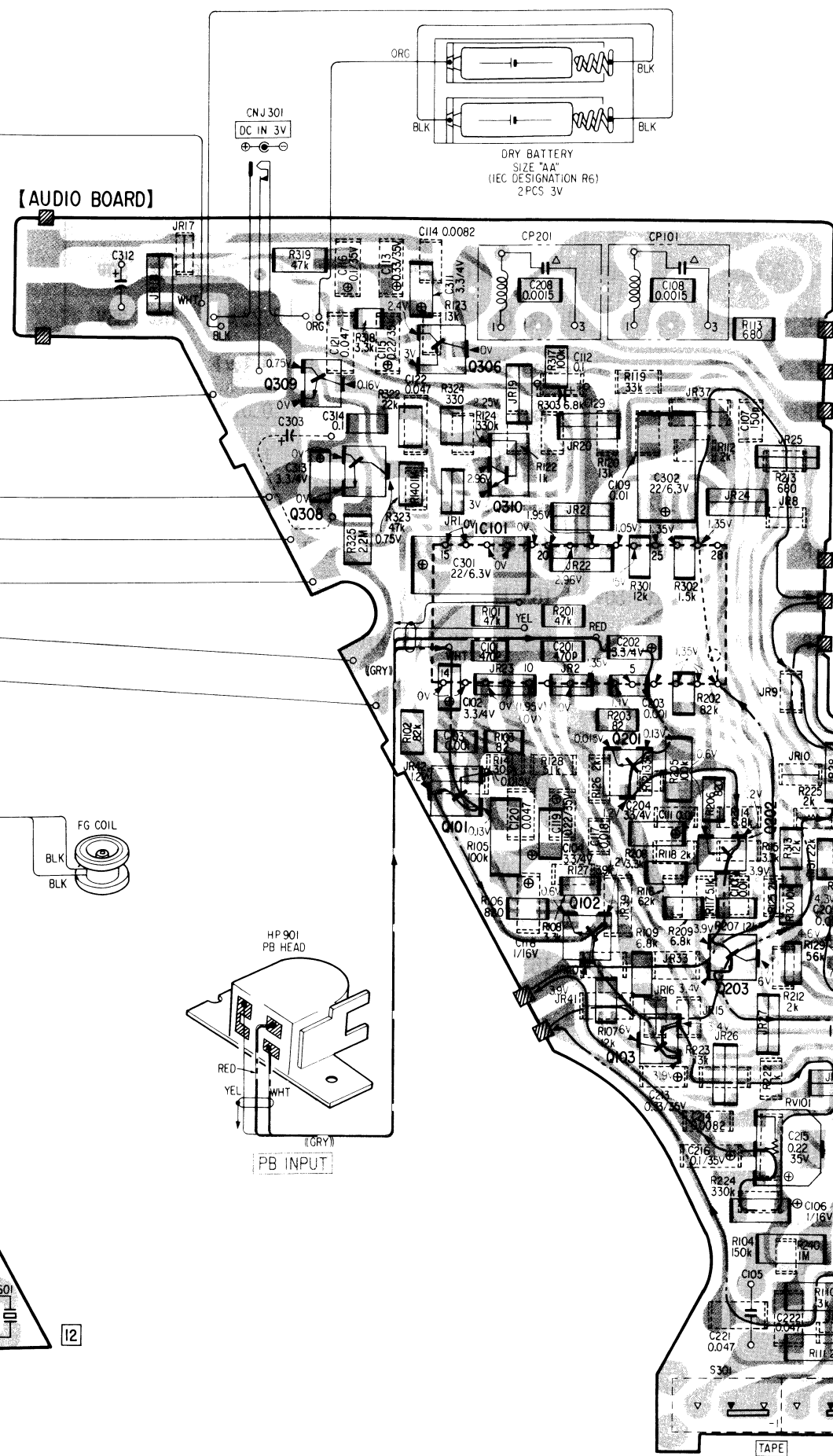
F

G

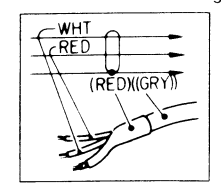
H

I

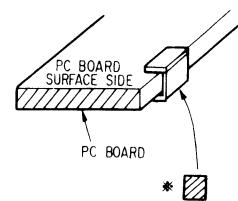
J



Note:
• Color code of sleeving over the end of the jacket.



- : parts extracted from the component side.
- ⊗ : Through hole.
- : Dolby NR switch mounted side
- ▨ : jack component side
- ▨ : jack component side +B pattern
- : signal path
- : L-CH signal path
- : R-CH signal path
- : part of Dolby NR switch mounted side.



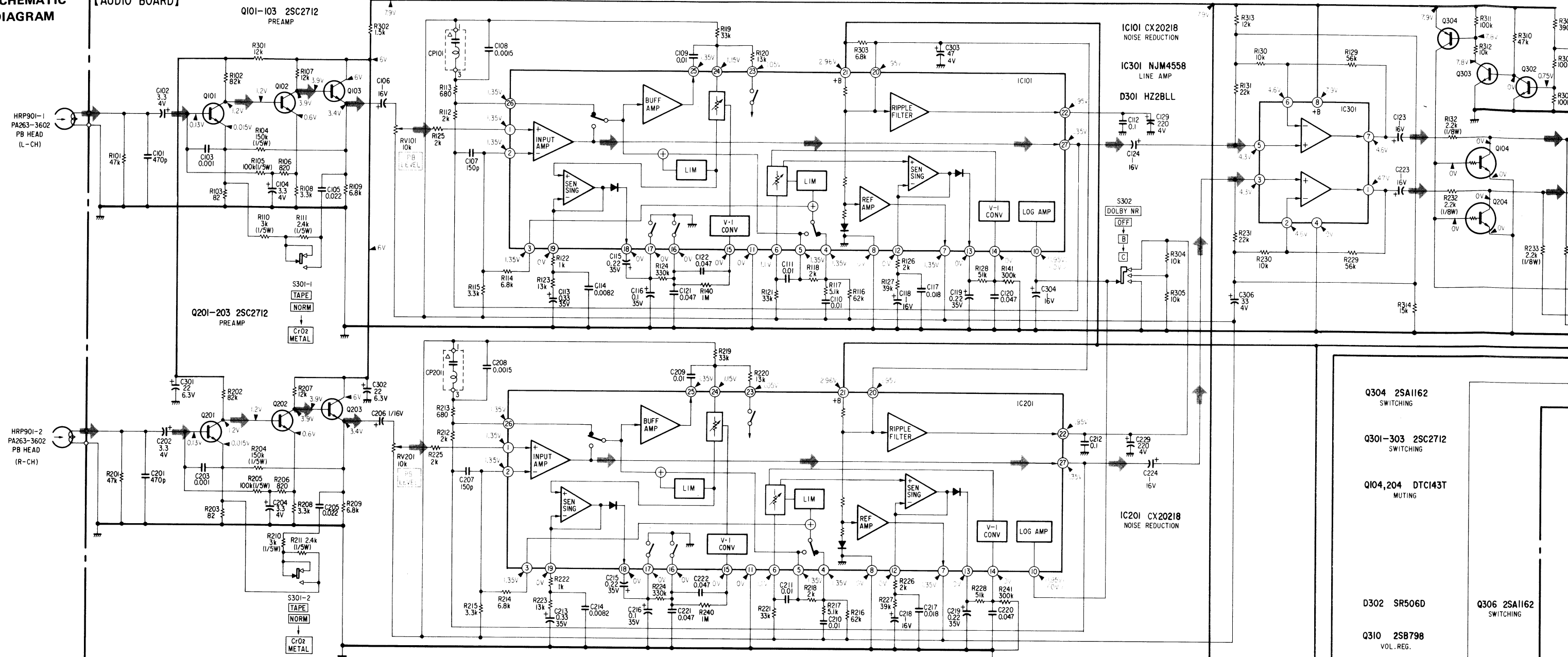
● Semiconductor Lead Layouts

2SC2712-G DTC143TK 2SD596	2SA1162	CX20218 CX20084
NJM4558M	TA7688F	MSM58141RS
	SR506D	RD7.5MB1

Q · IC	D
	306
	309
	308 310
	IC101
	201
	202
	102
	203 IC301
	103 IC201
	301
	IC302
	304 302
	104
	303
	204
	302
	305

SCHEMATIC DIAGRAM

[AUDIO BOARD]



[SERVO BOARD A]

[SERVO BOARD B]

